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UNITED STATES AIR FORCE

# OCCUPATIONAL SURVEY REPORT

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JUL 06 1987  
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MAINTENANCE DATA SYSTEMS ANALYSIS  
CAREER LADDER  
AND  
MAINTENANCE SCHEDULING CAREER LADDER

AFSCs 391X0 AND 392X0

AFPT 90-391-539

AFPT 90-392-540

JUNE 1987

OCCUPATIONAL ANALYSIS PROGRAM  
USAF OCCUPATIONAL MEASUREMENT CENTER  
AIR TRAINING COMMAND  
RANDOLPH AFB, TEXAS 78150-5000

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HQ SAC/TTGT	2		2	
HQ TAC/LGM	1		1	
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## PREFACE

This report presents the results of a detailed occupational survey of the Maintenance Data Systems Analysis (AFSC 391X0) and Maintenance Scheduling (AFSC 392X0) career ladders. Authority for conducting occupational surveys is contained in AFR 35-2. Computer printouts used in the analysis of this report are available for use by operations and training officials.

The survey instrument was developed by First Lieutenant William Carney, Inventory Development Specialist, with computer support furnished by Ms Olga Velez. Ms Anita R. Carter provided administrative support. Captain Paula M. Erichsen, Occupational Analyst, analyzed the survey data and wrote the final report. This report has been reviewed and approved for release by Lieutenant Colonel Charles D. Gorman, Chief, Airman Analysis Branch, Occupational Analysis Division, USAF Occupational Measurement Center, Randolph AFB, Texas.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel (see DISTRIBUTION on page i). Additional copies are available upon request to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Division (OMY), Randolph AFB, Texas 78150-5000 (AUTOVON 487-6623).

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## SUMMARY OF RESULTS

1. Survey Coverage: The 39XXX career ladders were surveyed to obtain current data for use in training management decisions and to assess the utilization of former AFSC W-392X0 personnel. A combined job inventory was administered worldwide between December 1985 and April 1986. The 2,110 respondents comprising the final sample included 782 members holding DAFSC 391X0 (89 percent of those eligible) and 1,328 members reporting DAFSC 392X0 (85 percent of those eligible). The overall 39XXX career field, as well as all using major commands, was well represented in the survey sample.

2. Specialty Jobs: Six clusters and nine independent job types were identified in the career ladder structure analysis. Five clusters and eight of the independent job types were clearly AFSC-specific, with members performing technical duties characteristic of the career ladders involved. The remaining cluster and independent job type represented a combination of both 391X0 and 392X0 personnel working in either supervisory/managerial or technical training positions. Although the majority of former AFSC W-392X0 personnel have transitioned into the 391X0 career ladder, a fairly substantial number are still working in jobs specific to the 392X0 career ladder and are reporting a 392X0 DAFSC.

3. Career Ladder Progression: In both career ladders, 3- and 5-skill level jobs were primarily technical in nature, with little responsibility for supervision or management. Supervisory, managerial, and administrative functions became the more dominant characteristics of the 7-skill level jobs in each ladder, although a variety of technical tasks were still performed. Nine-skill level and CEM Code personnel were performing a predominantly staff-type job and are the primary managers in their career ladders.

4. AFR 39-1 Specialty Descriptions: Descriptions for both the 391X0 and 392X0 career ladders were complete and accurately portrayed the nature of the jobs.

5. Training Analysis: Both the STS and POI for the 391X0 career ladder showed several items performed by low percentages of respondents when compared with survey data. Also, several tasks supported by survey data were not matched to either document. The 392X0 STS was generally well supported by survey data. The POI, however, showed several objectives performed by low percentages of first-job and first-enlistment respondents. Overall, a thorough review of the STS and POI for both career ladders is in order.

6. Implications: The current classification structure is clearly supported by survey data. Adjustments to the training documents for both career ladders are probably appropriate. The utilization of former AFSC W-392X0 personnel should be reviewed by career field managers.

OCCUPATIONAL SURVEY REPORT  
MAINTENANCE MANAGEMENT SYSTEMS CAREER LADDERS  
(AFS 39XXX)

INTRODUCTION

↓  
This is a report of an occupational survey of the Maintenance Data Systems Analysis (AFSC 391X0) and Maintenance Scheduling (AFSC 392X0) career ladders completed by the Occupational Analysis Division, USAF Occupational Measurement Center. Previous survey results pertaining to the Maintenance Management Systems career field were published in October 1978 (AFSC 392X0) and October 1979 (AFSC 391X0).

Background

This survey was requested by the 3330 Technical Training Wing, Chanute AFB IL, and HQ ATC/TTQL to assess the impact on training of the October 1982 restructuring of the 39XXX career field. Prior to October 1982, the 391X0 career ladder was separated into two shredouts: A - Aerospace Weapons Systems, and B - Communications-Electronics. The 392X0 career ladder was entered laterally by personnel previously qualified at the 5- or 7-skill level in one of several maintenance-related specialties. Additionally, in April 1976, maintenance documentation functions related to the Maintenance Management Information and Control System (MMICS) were added to the 392X0 ladder, and a W-prefix representing systems analyst functions was assigned to the ladder to designate this files maintenance (data base management) function. With the advent of the October 1982 restructuring, several changes occurred. The A and B shredouts were deleted from the 391X0 career ladder, and the W-prefix (data base management) responsibilities of the 392X0 career ladder were realigned into the 391X0 career ladder. The 392X0 career ladder became a direct-entry versus lateral-entry ladder with input from Basic Military Training School directly to the technical school at Chanute AFB IL. In addition, the 39300 CEM Code was deleted from the career field and replaced with separate CEM Codes for each ladder (AFSCs 39100 and 39200, respectively).

Specifically, two major issues <sup>are</sup> will be addressed in this report: (1) Current training requirements for the 391X0 and 392X0 career ladders in light of the October 1982 restructuring of the 39XXX career field, and (2) Current utilization of former AFSC W-392X0 personnel.

As described in the AFR 39-1 specialty descriptions, personnel in the 391X0 career ladder are responsible for monitoring, collecting, assembling, and auditing maintenance data for reports and briefings; controlling and operating the Management Information System; and coordinating and interacting

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with base data services monitors. Personnel in the 392X0 specialty are responsible for planning and scheduling utilization and maintenance of aircraft, engines, munitions, and associated aerospace ground equipment (AGE), including precision measurement equipment (PME); scheduling and controlling workload requirements; and maintaining weapons system records. ←

Primary entry into these career ladders is from Basic Military Training School through a Category A, 12-week formal training course for 391X0 personnel (C3ABR39130-001) and a Category A, 9-week 4-day formal training course for 392X0 personnel (C3ABR39230-000). Course coverage for 391X0 personnel includes equipment maintenance procedures, data processing fundamentals, specific data loading for files maintenance, man-hour and maintenance data systems, procedures for troubleshooting and maintaining the MMICS data base systems, files recovery procedures, Air Force Online Data Systems (AFOLDS) applications, statistical applications, analysis and graphic presentation of maintenance data, and use of calculators and microcomputers. Course coverage for 392X0 personnel includes maintenance management concepts, data systems and reports, configuration management of time compliance technical orders, aerospace vehicle inspection and time change item requirements, forecasting manpower and aerospace vehicle and support equipment capabilities, developing generation flow plans and maintenance plans, and engine tracking planning.

Since this report covers two separate ladders, the report is divided into four sections. The first section deals with the career ladder structure utilizing the total sample of 391X0 and 392X0 personnel. Sections II and III discuss the separate ladders, including topics such as: (1) comparison of specialty jobs (career ladder structure) and other survey data with career ladder documents, such as AFR 39-1 Specialty Descriptions, Specialty Training Standards, and Plans of Instruction; (2) analyses of DAFSC groups; and (3) MAJCOM and CONUS-Overseas group comparisons. Section IV will highlight an analysis of job satisfaction data utilizing the total sample of 391X0 and 392X0 personnel, along with the survey implications.

## SURVEY METHODOLOGY

### Inventory Development

The data collection instrument for this survey was USAF Job Inventory AFPT 90-391-539 and AFPT 90-392-540, dated December 1985. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, tasks from the previous survey instruments, and data from the last occupational survey reports (OSR). This preliminary task list was refined and validated through personal interviews with 34 subject-matter experts selected to cover a wide variety of 391X0 and 392X0 career ladder functions at the following locations:

Bergstrom AFB TX: TAC base; selected to interview 391X0 and 392X0 personnel working at the Numbered Air Force and wing levels.



Chanute AFB IL: Location of ABR technical training courses.

Dyess AFB TX: SAC base; selected to interview personnel working with the Core Automated Maintenance System (CAMS).

Ellsworth AFB SD: SAC base with both a missile wing and a bomb wing.

Langley AFB VA: TAC base; selected to interview 391X0 and 392X0 personnel working at the headquarters level and within a fighter wing.

McGuire AFB NJ: Host base and a typical MAC base in terms of data compilation and analysis for an airlift mission.

Scott AFB IL: Selected to interview 391X0 personnel with knowledge in the Communications-Electronics (C-E) area.

Pease AFB NH: Host unit and a typical SAC base.

The resulting job inventory contained a comprehensive listing of 541 tasks grouped under 17 duty headings and a background section requesting such information as grade, duty title, level of organization assigned, and job satisfaction data.

### Survey Administration

During the period December 1985 through April 1986, Consolidated Base Personnel Offices (CBPO) in operational units worldwide administered the inventory to job incumbents holding DAFSC 39XXX. These job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL).

Each individual who completed the inventory first completed an identification and biographical section and then checked each task performed in his or her current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (a very small amount of time spent) to 9 (a very large amount of time spent).

To determine relative time spent for each task checked by a respondent, all of an incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

## Survey Sample

Personnel who participated in the survey were carefully selected to ensure an accurate representation across major commands (MAJCOM) and paygrade groups. All eligible DAFSC 39XXX personnel were mailed survey booklets. Table 1 reflects the percentage distribution, by MAJCOM, of assigned personnel in the 391X0 and 392X0 career ladders as of December 1985. Also shown is the MAJCOM distribution of the survey respondents. The 782 DAFSC 391X0 respondents in the final sample represent 66 percent of the total assigned personnel and 89 percent of those eligible. The 1,328 DAFSC 392X0 respondents represent 65 percent of the total assigned personnel and 85 percent of those eligible. Table 2 reflects the paygrade distribution for DAFSC 39XXX members. As reflected in these tables, the survey sample provides a very good representation of the career ladder populations.

## Task Factor Administration

In addition to completing the job inventory, selected senior AFSC 391X0 and 392X0 personnel were asked to complete a second booklet for either task difficulty (TD) or training emphasis (TE). These booklets are processed separately from the job inventories. The rating information is then used in a number of different analyses discussed in detail within this report.

Task Difficulty (TD). Each individual completing a TD booklet was asked to rate all inventory tasks on a 9-point scale, ranging from 1 (extremely low relative difficulty) to 9 (extremely high relative difficulty). Difficulty is defined as the length of time required by the average member to learn to do the task. Task difficulty data were independently collected from 57 senior 391X0 personnel and 62 senior 392X0 personnel stationed worldwide. The interrater reliability (as assessed through components of variance of standardized group means) of the TD data provided by the AFSC 391X0 raters was .95, indicating excellent agreement among raters. An analysis of the data provided by the AFSC 392X0 raters revealed that a sufficient level of agreement between these raters was not found; thus, TD data for AFSC 392X0 personnel will not be reported in this study. Task difficulty ratings were adjusted so tasks of average difficulty have a rating of 5.00, with a standard deviation of 1.00. The resulting data are essentially a rank ordering of tasks indicating the degree of difficulty of each task in the inventory.

Training Emphasis (TE). Individuals completing TE booklets were asked to rate inventory tasks on a 10-point scale ranging from 0 (no training required) to 9 (extremely heavy training required). Training emphasis is a rating of which tasks require structured training for first-enlistment personnel. Structured training is defined as training provided at resident technical schools, field training detachments, mobile training teams (MTT), formal OJT, or any other organized training. Training emphasis data were independently collected from 110 experienced AFSC 391X0 and 56 experienced AFSC 392X0 personnel stationed worldwide. The interrater reliability (as assessed through components of variance of standardized group means) was .97 for 391X0 raters and .97 for 392X0 raters, indicating that within each career ladder there was

TABLE 1  
COMMAND REPRESENTATION OF SURVEY SAMPLE

COMMAND	391X0		392X0	
	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
TAC	30	28	31	33
SAC	24	24	20	21
MAC	11	12	14	16
USAFE	9	11	13	14
ATC	7	6	10	6
AFCC	7	6	**	**
PACAF	5	5	5	4
AFSC	4	4	3	4
AAC	1	2	2	1
OTHER	2	2	1	1

	391X0	392X0
Total Assigned:	1,192	2,058
Total Eligible:***	875	1,560
Total in Sample:	782	1,328
Percent of Assigned in Sample:	66%	65%
Percent of Eligible in Sample:	89%	85%

\* Assigned strength as of December 1985

\*\* Less than 1 percent

\*\*\* Excludes those in PCS status, students, hospitalized personnel, and personnel with less than 6 weeks on the job

TABLE 2  
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

<u>PAYGRADE</u>	<u>391X0</u>		<u>392X0</u>	
	<u>PERCENT OF ASSIGNED*</u>	<u>PERCENT OF SAMPLE</u>	<u>PERCENT OF ASSIGNED*</u>	<u>PERCENT OF SAMPLE</u>
AIRMAN	13	8	31	29
E-4	28	30	12	16
E-5	22	23	24	26
E-6	18	17	18	16
E-7	15	17	11	10
E-8	3	3	3	2
E-9	1	2	1	1

\* Assigned strength as of December 1985

very high agreement among raters as to which tasks required some form of structured training and which did not. In the 391X0 specialty, tasks rated high in TE have ratings of 2.82 and above, with an average TE of 1.51. Tasks rated high in TE for the 392X0 career ladder have ratings of 3.34 and above, with an average TE of 1.59. As discussed in the Task Difficulty section above, TE rating data may also be used to rank order tasks, indicating those tasks which senior NCOs in the field consider the most important for first-term airmen to know.

## SECTION I

### SPECIALTY JOBS (Career Ladder Structure)

A key aspect of the USAF occupational analysis program is to examine the job structure of a career ladder. Based on incumbent responses to survey questions, the tasks performed by career ladder personnel are examined and jobs are identified based on the similarity of tasks performed by incumbents and the relative time they spend performing the tasks. The resulting job structure is then compared to official career ladder documents. This analysis of actual jobs performed is made possible by the use of the Comprehensive Occupational Data Analysis Program (CODAP). This information can be used to examine the accuracy and completeness of career ladder documents (AFR 39-1 Specialty Descriptions and Specialty Training Standards) and to gain an understanding of current utilization patterns.

For this report, the career ladder structure is described in terms of clusters and independent job types. A cluster represents a larger unit of related job types. The job type is the basic unit of job analysis. It represents a specific group of individuals performing basically the same tasks and spending similar amounts of time on those tasks. When job type members perform tasks in common with other groups, they merge to form a larger unit of related jobs termed a cluster. Specialized job types too dissimilar to fit within a cluster are labeled independent job types (IJT).

#### Overview of Specialty Jobs

The specialty job structure of the Maintenance Management Systems career field was determined by performing a job type analysis of the survey data provided by the 782 AFSC 391X0 and 1,328 AFSC 392X0 survey respondents. Based on task similarity and the amount of relative time spent performing each task, the jobs performed by 39XXX personnel separated into two functional areas, six clusters and nine independent job types. Figure 1 illustrates this division of jobs. Five of the clusters were formed primarily by personnel in either the 391X0 or 392X0 specialty, while the sixth cluster was formed based on performance of tasks common to management and staff functions and included airmen from both 39XXX specialties surveyed. Only one of the independent job types (focusing on training responsibilities) contained representation from more than one career ladder. Overall, ladder distinctions were clear, with these AFSC-specific groupings indicating that the specific career ladders generally perform separate and distinct jobs.

# AFSC 39XXX CAREER LADDER STRUCTURE

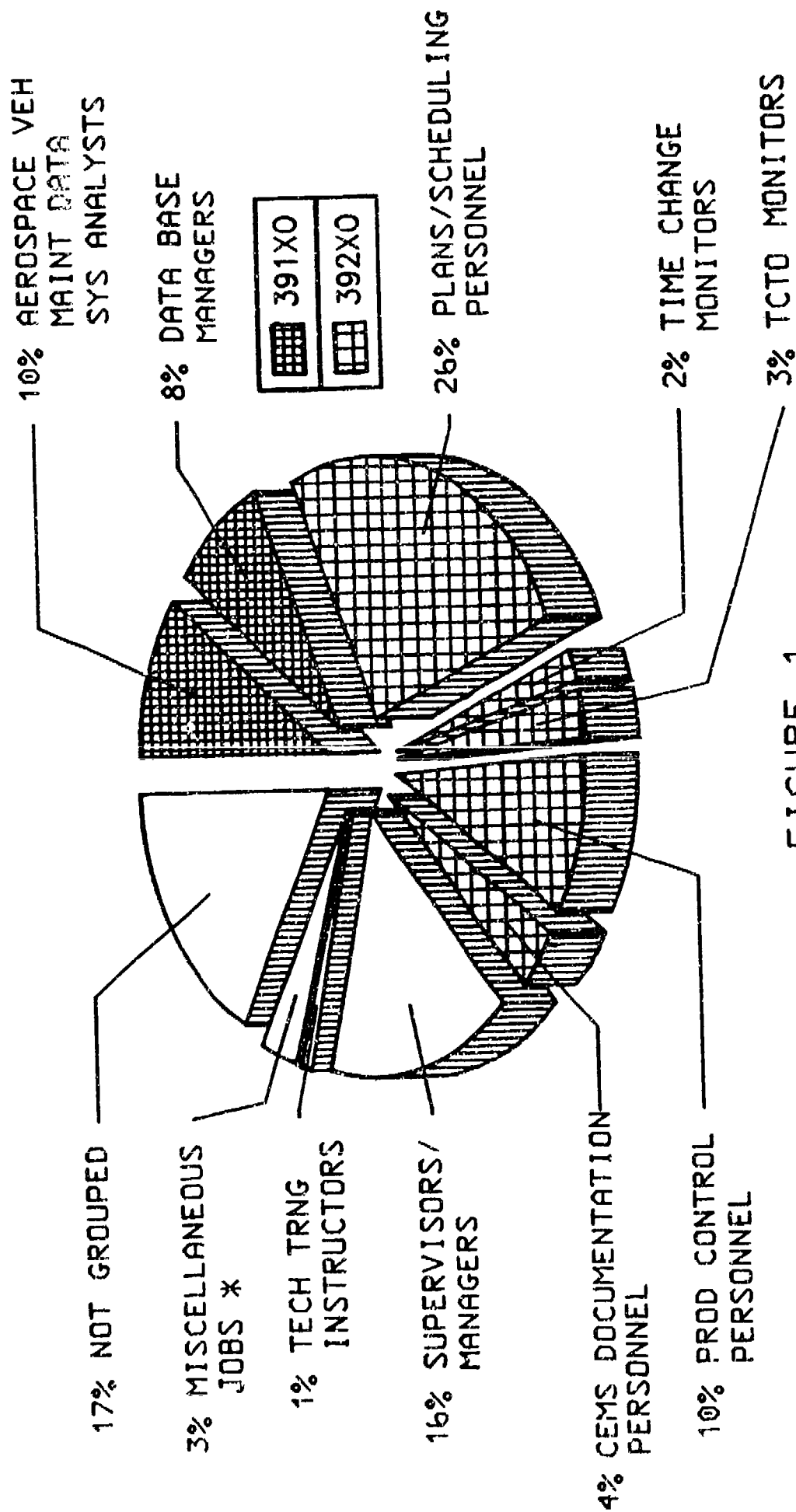


FIGURE 1

\* MISCELLANEOUS JOBS INCLUDE MMICS/CAMS FUNCTIONAL SYSTEMS MANAGERS, SPECIAL STUDIES ANALYSTS, HQ AFOTEC/USAFATWC PERSONNEL, OPERATIONAL TEST AND EVALUATION TEAM ANALYSTS, AND C-E STAFF ANALYSTS--ALL 391X0 JOBS--AND 392X0 MAJCOM AVDOs.

The six clusters and nine independent job types are listed below by title. The group (GRP) number beside each title is a computer-generated reference number. The letter "N" stands for the number of personnel in each group.

#### MAINTENANCE DATA SYSTEMS ANALYSIS FUNCTIONAL AREA

- I. AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS  
CLUSTER (GRP083, N=210)
- II. DATA BASE MANAGERS CLUSTER (GRP171, N=161)
- III. MMICS/CAMS FUNCTIONAL SYSTEMS MANAGERS CLUSTER (GRP380, N=16)
- IV. SPECIAL STUDIES ANALYSTS IJT (GRP538, N=6)
- V. HQ AIR FORCE OPERATIONAL TEST AND EVALUATION CENTER (AFOTEC)/  
USAF TACTICAL AIR WARFARE CENTER (USAFTAWC) PERSONNEL IJT  
(GRP435, N=5)
- VI. OPERATIONAL TEST AND EVALUATION TEAM ANALYSTS IJT (GRP230,  
N=10)
- VII. COMMUNICATIONS-ELECTRONICS (C-E) STAFF ANALYSTS IJT (GRP192,  
N=17)

#### MAINTENANCE SCHEDULING FUNCTIONAL AREA

- VIII. PLANS AND SCHEDULING PERSONNEL CLUSTER (GRP206, N=560)
- IX. TIME CHANGE MONITORS IJT (GRP420, N=36)
- X. TIME COMPLIANCE TECHNICAL ORDER (TCTO) MONITORS IJT  
(GRP396, N=62)
- XI. CONSOLIDATED ENGINE MANAGEMENT SYSTEM (CEMS) DOCUMENTATION  
PERSONNEL IJT (GRP453, N=85)
- XII. PRODUCTION CONTROL PERSONNEL CLUSTER (GRP130, N=218)
- XIII. MAJCOM AEROSPACE VEHICLE DISTRIBUTION OFFICERS (AVDOs) IJT  
(GRP472, N=5)

## OTHER JOBS

XIV. TECHNICAL TRAINING INSTRUCTORS IJT (GRP178, N=23)

XV. SUPERVISORS/MANAGERS IJT (GRP154, N=333)

Eighty-three percent of the survey respondents fell into the above job groups. The remaining 17 percent were performing tasks or sets of tasks that did not group with any of the defined job groups. Some of the job titles given by these personnel include Base Engine Manager, Base PMEL Coordinator, and Policies and Procedures Analyst.

### Group Descriptions

The following paragraphs contain brief descriptions of the clusters and independent job types identified in the analysis. Selected background data are provided for these groups in Table 3. Representative tasks, together with selected background data, are listed in Appendix A.

1. AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS CLUSTER (GRP083, N=210). This cluster of 210 airmen (the largest group of 391X0 personnel identified) represents 10 percent of the total survey sample. Comprised almost entirely of 391X0 personnel (98 percent of the group), 68 percent of the incumbents hold DAFSC 39150 and 14 percent report DAFSC 39170. These personnel perform all facets of aerospace vehicle (aircraft and missile) maintenance data analysis. Overall, this includes monitoring and evaluating maintenance data inputs and outputs, organizing and evaluating maintenance data, and writing reports or giving briefings on the maintenance trends and capabilities identified. Of the average 33 tasks performed by the group, typical ones include:

- compile data for aircraft summaries
- prepare maintenance summaries
- evaluate maintenance data collection (MDC) data
- prepare aircraft studies or briefings
- review full mission capable rates (FMCr) for developing trends or problems
- collect aircraft or missile scheduling effectiveness data
- assemble data or records for computation of statistics, such as mean time between failure (MTBF)

The majority of these personnel report being assigned to either the wing (70 percent) or squadron (20 percent) level. Several identified themselves as Dedicated Aircraft Maintenance Unit (AMU) Analysts, working within a particular AMU, but still being carried as a wing resource. Overall, a high degree of diversity was noted within the cluster itself. Although the majority of



TABLE 3

## SELECTED BACKGROUND INFORMATION FOR CAREER LADDER STRUCTURE GROUPS

	AEROSPACE VEHICLE MAINTENANCE DATA SYS ANALYSTS (GRP083)	DATA BASE MANAGERS (GRP171)	MMICS/CAMS FUNCTIONAL SYS MGRS (GRP380)	SPECIAL STUDIES ANALYSTS (GRP538)	HQ AFOTEC/ USAF TAWC PERSONNEL (GRP435)	OPERATIONAL TEST AND EVAL TEAM ANALYSTS (GRP230)	C-E STAFF ANALYSTS (GRP192)
NUMBER IN GROUP	210	161	16	6	5	10	17
PERCENT OF TOTAL SAMPLE	10%	8%	*	*	*	*	*
PERCENT IN CONUS	68%	64%	81%	83%	100%	100%	71%

DAFSC DISTRIBUTION (PERCENT RESPONDING)							
39130	13%	4%	0	0	0	0	0
39150	68%	57%	6%	17%	0	20%	23%
39170	14%	39%	56%	83%	80%	70%	77%
39190	2%	*	13%	0	20%	10%	0
39100	1%	0	13%	0	0	0	0
39230	0	0	0	0	0	0	0
39250	1%	0	0	0	0	0	0
39270	1%	0	0	0	0	0	0
39290	0	0	6%	0	0	0	0
39200	0	0	6%	0	0	0	0

AVERAGE PAYGRADE	E-4	E-5	E-7	E-5,E-6	E-7,E-8	E-6	E-6
AVERAGE TICF** (MONTHS)	52	60	104	66	194	136	126
AVERAGE TAFMS (MONTHS)	84	119	230	115	226	166	154
AVERAGE NUMBER OF TASKS	33	50	27	57	59	25	49
PERCENT FIRST ENLISTMENT	37%	21%	0	33%	0	0	12%
PERCENT SUPERVISING	20%	40%	44%	23%	0	30%	41%
PERCENT HOLDING FORMER W-392XC AFSC	1%	24%	75%	17%	0	0	6%

\* Less than 1 percent

\*\* Time in Career Field

TABLE 3 (CONTINUED)

## SELECTED BACKGROUND INFORMATION FOR CAREER LADDER STRUCTURE GROUPS

	PLANS AND SCHEDULING PERSONNEL (GRP206)		TIME CHANGE MONITORS (GRP420)		TCTO MONITORS (GRP396)		CEMS DOC PERSONNEL (GRP538)		PRODUCTION CONTROL PERSONNEL (GRP130)		AEROSPACE VEHICLE DISTR OFFICERS (GRP472)		TECHNICAL TRAINING INSTR (GRP178)		SUPERVISORS/ MANAGERS (GRP154)	
	NUMBER IN GROUP	PERCENT OF TOTAL SAMPLE	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
	560	26%	36	2%	62	3%	85	4%	218	10%	5	*	23	1%	333	16%
	72%		61%		65%		74%		74%		80%		96%		68%	
DAFSC DISTRIBUTION (PERCENT RESPONDING)																
39130	0		0		0		0		*		0		0		1%	
39150	0		3%		0		0		0		0		17%		14%	
39170	0		0		0		0		*		20%		26%		39%	
39190	0		0		0		0		0		0		0		6%	
39100	0		0		0		0		0		0		0		3%	
39230	8%		22%		15%		6%		12%		0		4%		*	
39250	56%		69%		74%		69%		57%		0		44%		4%	
39270	35%		6%		11%		25%		29%		40%		9%		21%	
39290	*		0		0		0		*		20%		0		8%	
39200	*		0		0		0		0		20%		0		4%	
AVERAGE PAYGRADE																
AVERAGE T1CF** (MONTHS)	E-4,E-5	60	E-3,E-4	37	E-4	46	E-4,E-5	53	E-4,E-5	64	E-7,E-8	155	E-5	94	E-6,E-7	118
AVERAGE TAFMS (MONTHS)		102		56		74		97		107		222		133		194
AVERAGE NUMBER OF TASKS		65		18		27		42		35		32		19		81
PERCENT FIRST ENLISTMENT		41%		67%		53%		38%		45%		0		13%		4%
PERCENT SUPERVISING		43%		3%		24%		33%		36%		20%		13%		87%
PERCENT HOLDING FORMER N-392X0 AFSC		4%		3%		5%		4%		4%		20%		4%		15%

\* Less than 1 percent

\*\* Time in Career Field

analysts followed essentially the same analysis process, their day-to-day taskings were dependent on the needs of the particular squadron or wing to which they were assigned. Thus, analysis identified only 11 tasks performed by over 50 percent of the cluster members, as opposed to a more homogeneous group where this figure would be much higher. All MAJCOMS are represented in this group, with the majority of personnel assigned to TAC (39 percent), SAC (20 percent), and USAFE (16 percent).

Thirty-seven percent of these cluster members are in their first enlistment. Overall, the cluster members average 4 years in the career field, 7 years TAFMS, and have an average paygrade of E-4. It is interesting to note that only 1 percent of these incumbents hold the former W-392X0 AFSC.

Within the cluster, a small group of analysts was identified working at MAJCOM and Numbered Air Force levels. While analyzing and compiling aircraft and missile maintenance data from subordinate units, they also perform evaluative tasks such as writing staff studies and making staff assistance visits.

II. DATA BASE MANAGERS CLUSTER (GRP171, N=161). In contrast to the previous group of Aerospace Vehicle Maintenance Data Systems Analysts, these 391X0 personnel (representing 8 percent of the survey sample) devote the majority (53 percent) of their job time to MMICS files maintenance (data base management) functions. Twenty-four percent hold the former W-392X0 AFSC. Most are assigned at either the wing (67 percent) or squadron (19 percent) level, working in either a files maintenance or host files maintenance section. They perform an average of 50 tasks (as compared to an average of 33 tasks for the previous group), devoting 50 percent of their time to 27 tasks. These tasks include:

- notify system users of status of unscheduled downtime
- for systems, such as MMICS
- coordinate system hardware problems or repair with DPI
- or users
- correct internal file errors
- verify computer inputs from users
- maintain systems advisory notice (SAN) files
- initiate delete history (DLH) procedures
- construct Air Force Online Data System (AFOLDS) inquiries
- initiate, prepare, or review difficulty reports (DIREPS)

As compared to the previous 391X0 group, these data base managers are slightly more experienced, averaging 5 years in the career field and 10 years TAFMS. Fifty-seven percent are qualified at the 5-skill level, while 39 percent are qualified at the 7-skill level. The majority (79 percent) are in their second or subsequent enlistment.

Three jobs were identified within the cluster. The largest consists of personnel who devote their time solely to aerospace vehicle data base management functions. A second smaller group of 27 personnel are assigned to

units where they perform both maintenance data systems analysis and data base management functions. The final group of 14 people are assigned to various Information Support Groups (ISG) under AFCC, performing data base management functions as they pertain to the reporting of Communications-Electronics (C-E) maintenance data. Along with performing the data base management tasks listed above, they also compile data for C-E maintenance summaries, prepare written narratives of C-E maintenance summaries, and prepare C-E studies.

III. MMICS/CAMS FUNCTIONAL SYSTEMS MANAGERS CLUSTER (GRP380, N=16). The majority (88 percent) of the personnel in this cluster are in the 391X0 career ladder and are assigned to HQ Standard Systems Center, Gunter AFS AL. Their job differs from personnel in the previous 391X0 clusters in that 67 percent of their job time is devoted to performing system analysis and design functions and files maintenance functions in support of the Maintenance Management Information and Control System (MMICS) and the Core Automated Maintenance System (CAMS). This includes managing the design, development, testing, and implementation of computer programs for these systems. Typical tasks performed include the following:

- coordinate system development with computer programmers, functional managers, or other analysts
- analyze proposals or suggestions for system modifications
- review implementation of system modifications, changes, or conversions, such as monthly releases or systems advisory notices (SAN)
- evaluate data automation requirements or data automation proposals
- edit or test programs in systems other than MMICS
- initiate, prepare, or review difficulty reports (DIREPS)

These are relatively senior 391X0 personnel, averaging over 19 years TAFMS, 9 years in the career field, and reporting an average paygrade of E-7. Seventy-five percent of these analysts hold the former W-392X0 AFSC.

Within the cluster, two smaller jobs were identified, with personnel in one performing primarily system analysis and design functions, and personnel in the other adding data base management tasks to the system analysis and design responsibilities.

IV. SPECIAL STUDIES ANALYSTS (GRP538, N=6). Personnel in this small group of predominantly SAC-assigned airmen (83 percent) are assigned to Special Studies sections at the wing, Numbered Air Force, and MAJCOM levels. As such, they reported working on a variety of special studies and projects, employing several different statistical techniques. Thirty-four percent of their job time is devoted to performing general calculations functions, such as calculating standard deviations; calculating means, medians, and modes; and calculating lines of regression, which differentiates them from the previous

clusters of 391X0 personnel described. The majority (83 percent) of these incumbents are qualified at the 7-skill level, with an average paygrade of between E-5 and E-6.

V. HQ AFOTEC/USAF TAWC PERSONNEL (GRP435, N=5). While also devoting 34 percent of their duty time to performing general calculations and analysis functions (as in the previous group of Special Studies Analysts), this highly specialized group of 391X0 personnel was brought together based on the performance of tasks dealing primarily with the computation and determination of information (23 percent of their job time). These tasks include:

- calculate aircraft or missile equipment or systems reliability
- assemble data or records for computation of statistics, such as mean time between failure (MTBF)
- calculate mean time to restore (MTTR) equipment to operable status
- compute or determine aircraft or missile equipment capabilities or availabilities
- compute mean time between maintenance (MTBM)
- compute mean time between occurrence (MTBO) of downtime failure

Only 8 percent of their job time is devoted to actual aerospace vehicle data functions. Members at HQ AFOTEC reported (via write-in comments) serving as Logistics Analysis Managers. The focus of their efforts is toward providing assessments of the operational effectiveness and suitability of future weapon systems and support equipment for the Air Force. USAFTAWC personnel reported providing assessments of the reliability/maintainability (R/M) of weapons systems under acquisition by the Air Force.

These are relatively senior 391X0 personnel, averaging 16 years in the career field and 19 years TAFMS. Their average paygrade is E-7 or E-8. Eighty percent are qualified at the 7-skill level.

VI. OPERATIONAL TEST AND EVALUATION TEAM ANALYSTS (GRP230, N=10). The majority (90 percent) of these 391X0 personnel are assigned to a Test and Evaluation Squadron, where they are responsible for assessing the operational capability of new weapon systems. This assessment includes (but is not limited to) initial operational test and evaluation (IOTE) and follow-on test and evaluation (FOTE) functions. As with the previous group of HQ AFOTEC/USAF TAWC personnel, these analysts spend 25 percent of their job time computing and determining information, such as mean time between maintenance (MTBM), mean time between failure (MTBF), and mean time to restore (MTTR) equipment to operable status. Additionally, 16 percent of their job time (the highest of all 391X0 groups identified) is devoted to evaluative functions, such as compiling data to evaluate engineering changes, and evaluating source documents, such as TOs. Only 5 percent of their time is spent performing general

calculations and analysis functions. The majority (70 percent) of these personnel hold DAFSC 39170, with an average paygrade of E-6. They average 11 years in the career field and 14 years TAFMS.

VII. COMMUNICATIONS-ELECTRONICS (C-E) STAFF ANALYSTS (GRP192, N=17). The majority of these 17 analysts are assigned to both the MAJCOM and Numbered Air Force levels, and to the various HQ Information System Divisions under AFCC. They differ from the previous 391X0 groups identified in that 33 percent of their job time is spent performing tasks related to C-E functions, with an additional 34 percent devoted to managerial, administrative, and quality evaluation functions. The majority of their work is accomplished in support of subordinate organizations, particularly in the area of C-E equipment status reporting. Typical tasks performed by the group include:

- evaluate C-E equipment status reports
- prepare ground C-E equipment status data reports
- interpret policies, directives, or procedures for subordinates
- compile data for C-E maintenance summaries
- make staff assistance visits
- calculate C-E equipment reliability
- review C-E inventory reports for accuracy

Seventy-seven percent of these personnel are qualified at the 7-skill level, with an average paygrade of E-6. They average 11 years in the career field, 13 years TAFMS, and 41 percent report some level of supervision.

VIII. PLANS AND SCHEDULING PERSONNEL CLUSTER (GRP206, N=560). This cluster of 392X0 personnel (accounting for 26 percent of the survey sample) represents the largest single group identified in the career ladder structure. Fifty-six percent of the incumbents hold DAFSC 39250 and 35 percent report DAFSC 39270. These personnel devote 39 percent of their job time to planning and scheduling maintenance for aerospace vehicles and associated equipment. This includes tasks such as preparing daily, weekly, and monthly maintenance schedules; adjusting schedules to meet emergency or priority maintenance requirements; distributing maintenance plans or schedules; conducting or attending maintenance planning meetings; scheduling accomplishment of TCTOs; and scheduling replacement of time change items. Overall, they perform an average of 65 tasks (the highest of all 392X0 groups identified), with 37 tasks accounting for 50 percent of their job time. The majority report working in either a Plans/Scheduling or Plans/Scheduling/Documentation section, and are assigned primarily at the wing (35 percent) and squadron (60 percent) levels. Across the group as a whole, several members identified themselves as NCOICs of either the Plans/Scheduling or Plans/Scheduling/Documentation section, suggesting that many senior NCOs in the career ladder perform a variety of maintenance scheduling technical tasks in addition to their supervisory responsibilities.

Three jobs were identified within the cluster, with differences between the jobs based on the type of equipment being scheduled for maintenance. Personnel in the largest job (accounting for 376 AFSC 392X0 personnel) plan and schedule aircraft maintenance. Distinctions within this job were noted based on the schedulers being assigned under either a centralized or decentralized maintenance concept. Those working under a centralized maintenance concept devoted the majority of their time to planning and scheduling maintenance, while those working under a decentralized maintenance concept devoted approximately one-third of their time to documentation functions in addition to their planning and scheduling responsibilities. This reflects the fact that under a centralized maintenance concept, Plans/Scheduling is a separate section from Documentation, while these sections are combined under a decentralized maintenance concept. A large number of those schedulers working under the decentralized concept were working in Aircraft Maintenance Units (AMU). Schedulers in the two smaller jobs plan and schedule maintenance for either munitions or aerospace ground equipment.

Forty-one percent of these cluster members are in their first enlistment. Overall, the cluster members average 5 years in the career field, 9 years TAFMS, and have an average paygrade of E-4 or E-5.

IX. TIME CHANGE MONITORS (GRP420, N=36). This group of primarily 392X0 airmen are assigned at both the wing and squadron levels, and are responsible for loading, updating, forecasting, and scheduling time change requirements for assigned equipment. Sixty-four percent of their job time is devoted to documentation functions, as opposed to only 27 percent for the previous group of Plans and Scheduling personnel. The majority report working in either the Documentation section of a wing or squadron, or in a Consolidated Engine Management Branch. As compared to other 392X0 jobs identified in the career ladder structure, their job is somewhat limited in scope. On the average, they perform only 18 tasks (the smallest of all groups identified), 10 of which account for approximately 50 percent of their time. Some of these tasks include:

- initiate time change actions
- forecast inspection or time change requirements using remote devices
- update inspection or time change requirements using remote devices
- load initial inspection or time change requirements into system records
- schedule replacement of time change items

Sixty-seven percent of these airmen are in their first enlistment, with an average paygrade of E-3 or E-4. With only 3 years in the career field and 4-1/2 years TAFMS, they are also the least experienced of all 392X0 personnel identified. The majority (69 percent) are qualified at the 5-skill level; 22 percent are qualified at the 3-skill level.

X. TCTO MONITORS (GRP396, N=62). As in the previous group of Time Change Monitors, the majority (97 percent) of these 392X0 personnel are assigned to both the wing and squadron levels and perform primarily a documentation function. Specifically, they are responsible for monitoring, scheduling, and controlling either aircraft or engine TCTOs. Fifty percent of their job time is spent performing 11 tasks, including the following:

- update TCTO status changes or reports
- review TCTO status reports
- update TCTO status information using remote devices
- load TCTO requirements into computer records
- participate in monthly TCTO kit reconciliation meetings
- schedule accomplishment of TCTOs

Their job is somewhat broader in scope than that of the Time Change Monitors (an average of 27 tasks are performed versus 18) and they are slightly more experienced. Members average 6 years TAFMS, 4 years in the career field, and 47 percent are in their second or subsequent enlistment. The majority (74 percent) are qualified at the 5-skill level.

XI. CONSOLIDATED ENGINE MANAGEMENT SYSTEM (CEMS) DOCUMENTATION PERSONNEL (GRP453, N=85). These 392X0 personnel, like the Time Change Monitors and TCTO Monitors just discussed, also perform tasks related to a documentation function, yet differ in that the majority are assigned to a Consolidated Engine Management Branch. As such, they perform all of the tasks encompassed by the Time Change and TCTO Monitor groups as they apply to engine management. Several incumbents indicated (via write-in comments) performing tasks such as setting up engine record jackets, maintaining engine status in MMICS, and scheduling various engine inspections. Overall, their job is broader in scope (an average of 42 tasks are performed) and their experience level is higher than personnel in the previous two jobs. Sixty-nine percent are qualified at the 5-skill level, 25 percent are qualified at the 7-skill level, with 62 percent in their second or subsequent enlistment. Additionally, these personnel average over 8 years TAFMS and hold an average paygrade of E-4 or E-5.

XII. PRODUCTION CONTROL PERSONNEL CLUSTER (GRP130, N=218). This cluster of predominantly 392X0 personnel represents 10 percent of the total survey sample and is the second largest group of 392X0 personnel identified in the career ladder structure. In contrast to the planning, scheduling, and documentation functions represented by the previous groups of 392X0 personnel, these incumbents devote 62 percent of their job time to tasks pertaining to production control activities. Overall, this includes acting as the central point for controlling, scheduling, and routing all reparable parts between base supply and the maintenance shops, thus controlling all in-shop, off-equipment maintenance. Of the average 35 tasks performed by the group, typical ones include:



- make entries on AFTO Forms 350 (Reparable Item Processing Tag)
- reconcile due in from maintenance (DIFM) lists, such as R-26 reports
- assign job control numbers to unscheduled maintenance jobs
- coordinate DIFM processing actions with units of supply
- schedule calibration or maintenance of precision measurement equipment (PME)
- assign priorities for shop repair or fabrication
- identify PME items
- make in-progress work checks

The majority of these personnel are assigned to SAC, MAC, and ATC, working primarily at the wing (33 percent) and squadron (62 percent) levels. Fifty-seven percent hold DAFSC 39250 and 29 percent report DAFSC 39270. Almost half (45 percent) are in their first enlistment. These personnel average 5 years in the career field and 9 years TAFMS, with an average paygrade of E-4 or E-5.

Within the cluster, three jobs were identified. While two of the jobs differ based on the type of maintenance the members deal with (aerospace vehicle versus PME), the third is composed of more senior personnel who serve as NCOICs of a Production Control shop, performing both technical and supervisory responsibilities.

Finally, it is interesting to note that all references to production control activities (with the exception of PME responsibilities) have been deleted from the AFR 39-1 Specialty Descriptions for the 392X0 career ladder, as of 30 April 1987. Since Production Control personnel represent approximately 16 to 20 percent of all 392X0 personnel surveyed between December 1985 and April 1986, career field managers will need to ensure that appropriate steps are taken to effect a smooth transition of these personnel into other facets of the career ladder.

XIII. MAJCOM AEROSPACE VEHICLE DISTRIBUTION OFFICERS (AVDO) (GRP472, N=5). These very experienced personnel (averaging over 13 years in the career field, with an average paygrade of E-7 or E-8), are predominantly 392X0 airmen. They are assigned at the MAJCOM level and are responsible for ensuring the integrity of the Aerospace Vehicle and Equipment Inventory, Status, and Utilization Reporting System (AVISURS). This includes assigning and distributing command vehicles based on MAJCOM authorizations, reviewing vehicle status reports from subordinate units for accuracy, and reviewing the vehicle utilization reported by subordinate units for accuracy. In addition, they devote over 25 percent of their duty time to various management functions, such as making staff assistance visits; drafting correspondence; and interpreting policies, directives, or procedures for subordinates.

XIV. TECHNICAL TRAINING INSTRUCTORS (GRP178, N=23). This independent job type includes both 391X0 (43 percent) and 392X0 (57 percent) personnel who teach entry-level, as well as advanced career ladder courses at Chanute AFB

IL. While performing many of the technical tasks associated with their respective career ladders, they also perform a series of tasks unique to the classroom setting. These tasks include:

- conduct resident course classroom training
- administer or score tests
- counsel trainees on training progress or problems
- develop course curricula or plans of instruction (POI)
- write tests, other than specialty knowledge tests (SKT)

These personnel average over 11 years TAFMS. Ninety-six percent are qualified at the 5- or 7-skill levels.

XV. SUPERVISORS/MANAGERS CLUSTER (GRP154, N=333). This cluster of 333 airmen represents 16 percent of the survey sample. Sixty percent of the group hold the 7-skill level (39 percent 391X0 and 21 percent 392X0), with 21 percent performing at the 9-skill or CEM Code levels. Averaging over 16 years TAFMS, 87 percent of these personnel report supervising an average of four personnel. Fifty-six percent of their duty time is devoted to supervisory, managerial, training, administrative, and quality evaluation functions. Representative tasks of the average 81 tasks performed by this group include:

- prepare airmen performance reports
- interpret policies, directives, or procedures for subordinates
- direct development or maintenance of status boards, graphs, or charts
- advise chief of maintenance on equipment maintenance or utilization
- establish work procedures
- write staff studies, surveys, or special reports, excluding training reports
- evaluate compliance with work standards

Included in this cluster were five jobs--three focusing on 391X0 responsibilities, one focusing on 392X0 responsibilities, and the final representing 9-skill level and CEM Code personnel from both AFSCs. Those personnel holding AFSC 391X0 were primarily supervising personnel in either Maintenance Data Systems Analysis or Data Base Management Branches, or were working as first-line supervisors within a Maintenance Data Systems Analysis Branch. The majority of AFSC 392X0 personnel were functioning as NCOICs of either Plans/Scheduling/Documentation, Plans/Scheduling, or Documentation, or as NCOICs of a Consolidated Engine Management Branch.

### Comparison of Specialty Jobs

Six clusters and nine independent job types were identified in the career ladder structure analysis. Five clusters and eight of the independent job types were clearly AFSC-specific, with members performing technical duties characteristic of the career ladders involved. The remaining cluster and independent job type represented a combination of both 391X0 and 392X0 personnel working in either supervisory/managerial or technical training positions. Since these latter groups account for only 17 percent of the survey sample, it is clear that the vast majority of sample members are involved in jobs keyed to their specific AFSC. Moreover, with virtually no overlap in technical duties and functions between 391X0 and 392X0 career ladder members, survey data support the current classification structure.

### Utilization of Former AFSC W-392X0 Personnel

The main reason for including both 391X0 and 392X0 personnel in this survey was to assess the current utilization of former AFSC W-392X0 (MMICS files maintenance) personnel. With the October 1982 restructuring of the 39XXX career field, files maintenance (data base management) functions were deleted from the 392X0 career ladder and absorbed by the 391X0 career ladder. Current utilization of these personnel can be assessed both by determining their distribution across the specialty jobs outlined in this report and by looking at their current DAFSCs. Overall, a high percentage of former W-392X0 personnel working in jobs performed primarily by 391X0 personnel or reporting a 391X0 DAFSC would be a good indication that former W-392X0 personnel have indeed transitioned into the 391X0 career ladder.

Of the 2,110 respondents to the survey, 165 reported holding the former W-392X0 AFSC. Distribution of these personnel across career ladder specialty jobs is displayed in Figure 2. The majority (30 percent) of these personnel grouped into the SUPERVISORS/MANAGERS cluster, a job representing both 391X0 and 392X0 personnel. Twenty-three percent grouped together as DATA BASE MANAGERS (the job most closely paralleling the work of former W-392X0 personnel), while an additional 10 percent fell into smaller jobs specific to the 391X0 career ladder (MMICS/CAMS FUNCTIONAL SYSTEMS MANAGERS, AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS, SPECIAL STUDIES ANALYSTS, AND C-E STAFF ANALYSTS). Fourteen percent did not group into any of the jobs identified. The remaining 23 percent fell into jobs composed primarily of 392X0 personnel, with the majority (13 percent) grouping together as PLANS AND SCHEDULING PERSONNEL. In terms of their current DAFSCs, the majority (59 percent) reported a 391X0 DAFSC, while the remaining 41 percent reported a 392X0 DAFSC. Thus, while it appears that the majority of former AFSC W-392X0 personnel have transferred to the 391X0 career ladder, a substantial number are still working in traditional 392X0 jobs and are reporting a 392X0 DAFSC. As such, career field managers should closely review the current utilization of these personnel.

# DISTRIBUTION OF FORMER AFSC W-392X0 PERSONNEL ACROSS SPECIALTY JOB GROUPS (PERCENT MEMBERS PERFORMING)

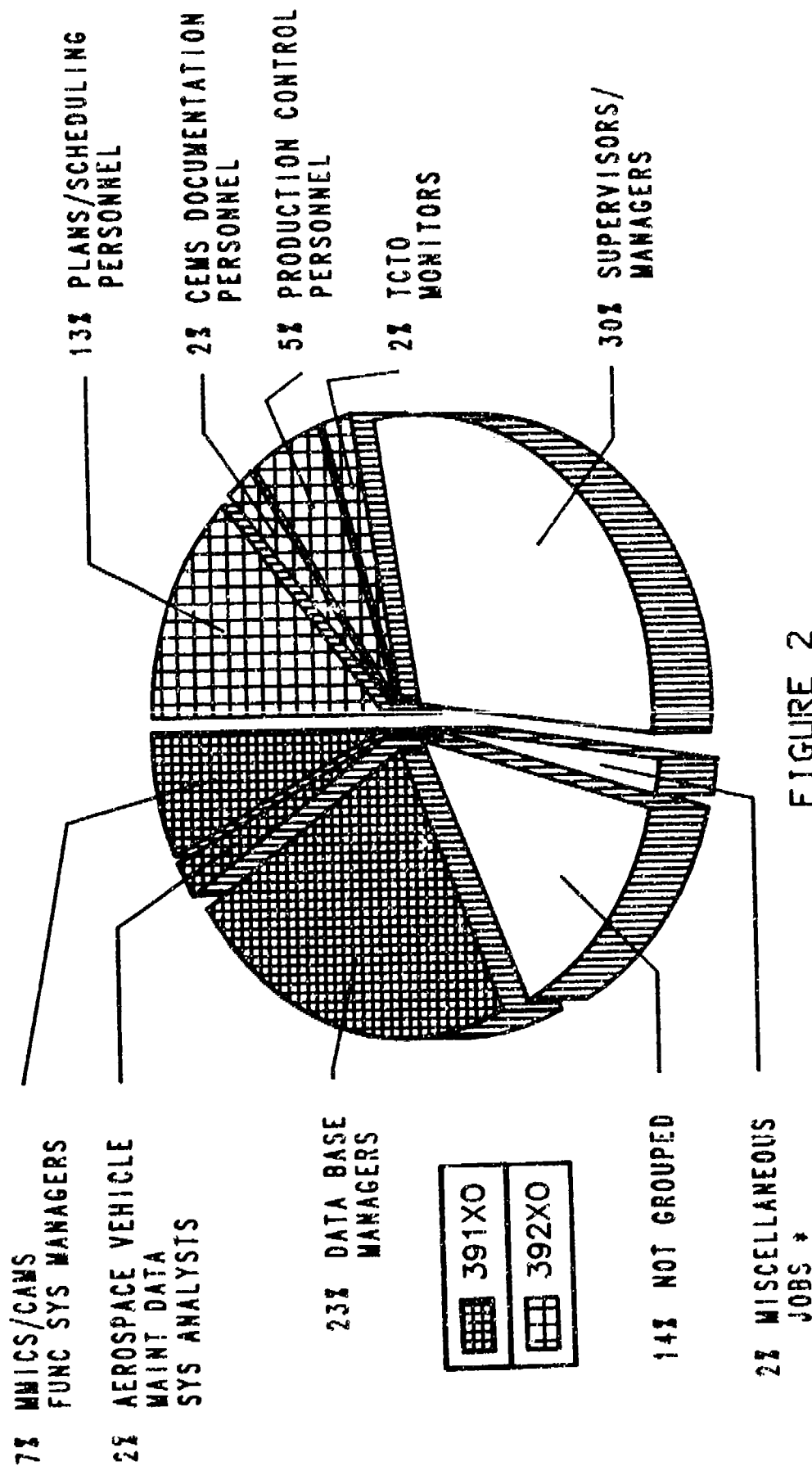


FIGURE 2

\* MISCELLANEOUS JOBS INCLUDE 391X0 SPECIAL STUDIES ANALYSTS AND C-E STAFF ANALYSTS--392X0 TIME CHANGE MONITORS AND MAJCOM AVDOs--AND TECHNICAL TRAINING INSTRUCTORS.

### Comparison of Current Survey To Previous Survey Specialty Job Structure

The specialty job structure identified in this survey was compared to those of the last occupational surveys of the 391X0 and 392X0 career ladders, published in October 1979 (AFPT 90-391-380) and October 1978 (AFPT 90-392-334), respectively. A comparison of the specialty jobs identified in each survey is shown in Table 4. Overall, only minor variations were noted in the jobs performed by current and previous survey respondents, thus reflecting two relatively stable career ladders.

Looking first at the 39XXX career field as a whole, one effect of the October 1982 restructuring of the career field is evident. Specifically, files maintenance (data base management) functions performed by former AFSC W-392X0 personnel are now performed primarily by 391X0 personnel working as DATA BASE MANAGERS and MMICS/CAMS FUNCTIONAL SYSTEMS MANAGERS. This is consistent with the 391X0 career ladder absorbing these responsibilities as part of the restructuring effort. As mentioned in the previous section, however, while the functions performed by former AFSC W-392X0 personnel are now performed primarily by 391X0 personnel, a substantial number of former W-392X0 personnel have remained in the 392X0 career ladder versus transitioning into the 391X0 career ladder.

Within the 391X0 career ladder, two small groups identified in the 1987 survey were not addressed in the 1979 survey (HQ AFOTEC/USAFTAWC PERSONNEL and OPERATIONAL TEST AND EVALUATION TEAM ANALYSTS). Although these personnel responded to the 1979 survey, they were dispersed throughout the identified job groups and did not form distinct groups of their own. Also, a group of LOGISTICS CENTER PRODUCTION ANALYSTS addressed in the 1979 survey were not found in the 1987 survey, as the function performed by these analysts is now accomplished primarily by civilian personnel. Additionally, the CEM PRODUCTION ANALYSTS identified in the 1979 survey included a large group of analysts working at the squadron and group levels, together with those analysts working at MAJCOM (staff-level) positions. In the current survey, the only C-E personnel working at the squadron level were those performing primarily a files maintenance (data base management) function, with actual C-E maintenance data systems analysis consuming only a small portion of their time. Consequently, they grouped together as a job type within the DATA BASE MANAGERS cluster. All C-E analysts identified in the current survey were located at the MAJCOM and Numbered AF levels, and at the various HQ Information System Divisions under AFCC. This redistribution of C-E personnel reflects a decision by HQ AFCC to delete C-E analyst positions from the squadron level (except for those individuals needed to perform C-E data base management functions), thus making MAJCOM (and equivalent level) personnel responsible for performing C-E maintenance data systems analysis for their respective units.

Within the 392X0 career ladder, two groups identified in the 1987 survey were not addressed in the 1978 survey (CONSOLIDATED ENGINE MANAGEMENT SYSTEM (CEMS) DOCUMENTATION PERSONNEL and MAJCOM AEROSPACE VEHICLE DISTRIBUTION OFFICERS (AVDO)). First, in the case of the CEMS DOCUMENTATION PERSONNEL, the CEMS concept began to take on increased importance within the 392X0 career ladder in 1982, thus explaining the absence of this group of personnel in the

TABLE 4

COMPARISON OF CAREER LADDER STRUCTURE GROUPS FOR CURRENT AND  
PREVIOUS SURVEYS

<u>1987 CLUSTERS AND INDEPENDENT JOB TYPES</u>	<u>AFSC 391X0A/B 1979 CLUSTERS AND INDEPENDENT JOB TYPES</u>
AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS SPECIAL STUDIES ANALYSTS	AEROSPACE VEHICLE PRODUCTION ANALYSTS
HQ AFOTEC/USAFATWC PERSONNEL	NOT IDENTIFIED AS A SPECIFIC JOB GROUP
OPERATIONAL TEST AND EVALUATION TEAM ANALYSTS	NOT IDENTIFIED AS A SPECIFIC JOB GROUP
C-E STAFF ANALYSTS	CEM PRODUCTION ANALYSTS
NOT IDENTIFIED AS A SPECIFIC JOB GROUP	LOGISTICS CENTER PRODUCTION ANALYSTS
PLANS AND SCHEDULING PERSONNEL	<u>AFSC 392X0 1978 CLUSTERS AND INDEPENDENT JOB TYPES</u>
TIME CHANGE MONITORS TCTO MONITORS	PLANS AND SCHEDULING PERSONNEL
CEMS DOCUMENTATION PERSONNEL	DOCUMENTATION PERSONNEL
PRODUCTION CONTROL PERSONNEL	NOT IDENTIFIED AS A SPECIFIC JOB GROUP
	PRODUCTION CONTROL PERSONNEL

TABLE 4 (CONTINUED)

COMPARISON OF CAREER LADDER STRUCTURE GROUPS FOR CURRENT AND PREVIOUS SURVEYS

	AFSC 392X0 1978 CLUSTERS AND INDEPENDENT JOB TYPES
MAJCOM AVDOS	NOT IDENTIFIED AS A SPECIFIC JOB GROUP
DATA BASE MANAGERS* MMICS/CAMS FUNCTIONAL SYSTEMS MANAGERS*	FILES MAINTENANCE PERSONNEL*
SUPERVISORS/MANAGERS	NOT IDENTIFIED AS A SPECIFIC JOB GROUP IN EITHER THE 1979 391X0A/B OR 1978 392X0 SURVEYS
TECHNICAL TRAINING INSTRUCTORS	NOT IDENTIFIED AS A SPECIFIC JOB GROUP IN EITHER THE 1979 391X0A/B OR 1978 392X0 SURVEYS

\* With the October 1982 restructuring of the 39XXX career field, former AFSC W-392X0 MMICS files maintenance functions were absorbed into the 391X0 career ladder

1978 survey of the career ladder. Secondly, although MAJCOM AVDOs responded to the 1978 survey, they were dispersed throughout the identified job groups and did not form a distinct group of their own.

Finally, a group of SUPERVISORS/MANAGERS and TECHNICAL TRAINING INSTRUCTORS identified in the 1987 survey were not specifically addressed in either the former 391X0A/B or 392X0 surveys. An examination of the clusters found within these surveys revealed that the majority of supervisory personnel responding to the surveys were also performing a large number of technical tasks; thus, they formed technical/supervisory-type jobs within the overall clusters themselves. Those technical training personnel responding to the former surveys were dispersed throughout the identified job groups and did not form distinct groups of their own.

### Summary

In summary, this analysis supports the current career field structure. The majority of 391X0 and 392X0 personnel are engaged in jobs specific to their respective career ladders, with the remainder performing either supervisory/mangerial or technical training functions. In terms of the utilization of former AFSC W-392X0 personnel, while the majority appear to have transitioned into the 391X0 career ladder, a fairly substantial number are still working in jobs specific to the 392X0 career ladder and are reporting a 392X0 DAFSC. Utilization of these personnel should be reviewed by career field managers.

## SECTION II

### ANALYSIS OF 391X0 DAFSC GROUPS

An analysis of DAFSC groups, together with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may then be used to evaluate how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the Specialty Training Standard (STS), reflect what career ladder personnel are actually doing in the field.

A comparison of the duty and task performance between DAFSCs 39130 and 39150 indicated that, while there are some minor differences, by and large, the jobs they perform are essentially the same. Therefore, they will be discussed as a combined group in this report. Similarly, DAFSC 39190 and CEM Code 39100 have also been combined for reporting purposes.

The distribution of 391X0 skill-level groups across career ladder jobs is displayed in Table 5, while Table 6 offers another perspective by displaying the relative percent time spent on each duty across the skill-level groups.



TABLE 5

DISTRIBUTION OF 391X0 DAFSC GROUPS ACROSS CAREER LADDER JOBS  
(PERCENT MEMBERS)\*

CAREER LADDER JOBS	DAFSC 39130/50 (N=432)	DAFSC 39170 (N=300)	DAFSC 39190/CEM CODE (N=50)
I. AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS (N=210)	39	10	12
II. DATA BASE MANAGERS (N=161)	22	21	2
III. MPCS/CAMS FUNCTIONAL SYSTEMS MANAGERS (N=16)	**	3	8
IV. SPECIAL STUDIES ANALYSTS (N=6)	**	1	2
V. HQ AFOTEC/USAFATMC PERSONNEL (N=5)	0	1	2
VI. OPERATIONAL TEST AND EVALUATION TEAM ANALYSTS (N=10)	**	2	2
VII. C-E STAFF ANALYSTS (N=17)	**	4	0
VIII. PLANS AND SCHEDULING PERSONNEL (N=560)	0	0	0
IX. TIME CHANGE MONITORS (N=36)	**	0	0
X. TCTO MONITORS (N=62)	0	0	0
XI. CEMS DOCUMENTATION PERSONNEL (N=85)	0	0	0
XII. PRODUCTION CONTROL PERSONNEL (N=218)	**	**	0
XIII. MAJCOM AVDOS (N=5)	0	**	0
XIV. TECHNICAL TRAINING INSTRUCTORS (N=23)	**	2	0
XV. SUPERVISORS/MANAGERS (N=333)	12	43	62
NOT GROUPED	23	11	12

\* Columns may not add to 100 percent due to rounding

\*\* Less than 1 percent

TABLE 6

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY  
391X0 DAFSC GROUPS

DUTIES	DAFSC 39130/50 (N=432)	DAFSC 39170 (N=300)	DAFSC 39190/CEM CODE (N=50)
A. ORGANIZING AND PLANNING	3	6	9
B. DIRECTING AND IMPLEMENTING	9	14	21
C. INSPECTING AND EVALUATING	4	8	17
D. TRAINING	3	6	5
E. PREPARING, UPDATING, AND FILING FORMS, RECORDS, AND REPORTS	12	9	5
F. PERFORMING AEROSPACE VEHICLE DATA FUNCTIONS	20	13	13
G. PERFORMING COMMUNICATIONS ELECTRONIC METEOROLOGICAL (CEM) FUNCTIONS	2	3	*
H. PERFORMING GENERAL CALCULATIONS AND ANALYSIS FUNCTIONS	7	7	6
I. PERFORMING FILES MAINTENANCE FUNCTIONS	17	16	6
J. PERFORMING SYSTEMS ANALYSIS AND DESIGN FUNCTIONS	2	4	8
K. MAINTAINING MAINTENANCE DOCUMENTATION AND RECORDS	9	1	2
L. PLANNING AND SCHEDULING MAINTENANCE	2	1	*
M. COMPUTING AND DETERMINING INFORMATION	5	5	4
N. MANAGING AND UPDATING AUTOMATED MAINTENANCE RECORDS	4	3	2
O. PROCESSING SHOP WORK	*	1	*
P. CONTROLLING MAINTENANCE	*	*	*
Q. PERFORMING MOBILITY SUPPORT FUNCTIONS	*	*	*

\* Less than 1 percent

In general, a typical pattern of progression is present, with personnel spending more of their time on duties involving supervisory and managerial tasks (Duties A, B, and C) as they move upward to the 9-skill and CEM Code levels (see Table 6). It is also evident, though, that 7-skill level and, to some extent, 9-skill level/CEM Code personnel are still involved with technical task performance, as will be pointed out in the specific skill level descriptions below.

### Skill Level Descriptions

DAFSCs 39130/50. The 432 airmen in the 3- and 5-skill level group (representing 54 percent of all 391X0 personnel surveyed) perform an average of 38 tasks, with 52 tasks accounting for approximately 50 percent of their job time. Overall, there appears to be a great deal of diversity in the jobs performed by these personnel. This can first be seen in Table 7, which lists representative tasks performed by these personnel. Only two tasks were performed by over 50 percent of the group, with only 55 percent performing the most commonly performed task. This suggests very little commonality among jobs held by these incumbents. The diversity of the group can also be seen in the distribution of these DAFSC members across career ladder jobs (Table 5). First of all, the majority of these personnel fell into three major jobs: AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS (39 percent), DATA BASE MANAGERS (22 percent), and SUPERVISORS/MANAGERS (12 percent). While on the surface, this small number of jobs does not suggest a great deal of diversity, a closer look reveals that the diversity is a function of the make-up of the individual jobs themselves. For example, as pointed out earlier in the SPECIALTY JOBS section of this report, a high degree of diversity was noted within the AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS job. Although the majority of the members followed essentially the same analysis process, their everyday taskings were dependent on the needs of the particular squadron or wing to which they were assigned. Since the majority (39 percent) of DAFSC 39130/50 personnel were included in the cluster, this helps to explain the diversity of the group as a whole. Finally, Table 5 also indicates that 23 percent of these personnel did not group in any of the jobs identified, again suggesting a great deal of diversity in the jobs performed by these members.

DAFSC 39170. At the 7-skill level, the degree of diversity noted at the lower skill levels begins to taper off and the job broadens with the addition of supervisory responsibilities to technical task performance. While 64 percent of the group report supervisory responsibilities (an average of three personnel are supervised), only 43 percent of their job time is spent performing tasks in the usual supervisory, managerial, training, and administrative duties (see Table 6, Duties A through E). Further, while 43 percent of these personnel are found in the SUPERVISORS/MANAGERS job group identified in the SPECIALTY JOBS section of this report, an equal percentage are distributed throughout the more technical jobs found in the career ladder, with the majority serving as DATA BASE MANAGERS (see Table 5). It is interesting to note that, while the percentage of 7-skill level personnel serving as AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS drops from 39 to 10 percent from the 3- and 5-skill levels, the percentage serving as DATA BASE

TABLE 7  
 REPRESENTATIVE TASKS PERFORMED BY DAFSC 39130 AND  
 39150 PERSONNEL  
 (PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 39130/50 (N=432)
N454 OPEN OR CLOSE REMOTE DEVICES	55
F147 COMPILE DATA FOR AIRCRAFT SUMMARIES	51
F165 EVALUATE MAINTENANCE DATA COLLECTION (MDC) DATA	48
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	48
K363 PREPARE MAINTENANCE SUMMARIES	47
F168 PREPARE AIRCRAFT STUDIES OR BRIEFINGS	41
F146 COMPILE AIRCRAFT SCHEDULING EFFECTIVENESS DATA	39
F182 REVIEW FULL MISSION CAPABLE RATES (FMCR) FOR DEVELOPING TRENDS OR PROBLEMS	39
M422 ASSEMBLE DATA OR RECORDS FOR MAINTENANCE SUMMARIES	38
F172 PREPARE WRITTEN NARRATIVES ON AIRCRAFT MAINTENANCE SUMMARIES	37
I326 NOTIFY SYSTEM USERS OF STATUS OF UNSCHEDULED DOWNTIME FOR SYSTEMS, SUCH AS MMICS	36
E134 PREPARE MAINTENANCE DATA COLLECTION REPORTS	35
I305 CONSTRUCT AIR FORCE ONLINE DATA SYSTEM (AFOLDS) INQUIRIES	35
K368 REVIEW OR SPOT CHECK MAINTENANCE DATA COLLECTION (MDC) SOURCE DOCUMENTS FOR ACCURACY	34
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	34
E120 PREPARE AIRCRAFT OR MISSILE STATUS DATA	33
K351 COLLECT AIRCRAFT OR MISSILE SCHEDULING EFFECTIVENESS DATA	33
I306 COORDINATE COMPUTER TIME WITH DATA PROCESSING INSTALLATIONS (DPI) OR COMPUTER ROOMS	31
I309 COORDINATE SYSTEM HARDWARE PROBLEMS OR REPAIR WITH DPI OR USERS	30
E116 PREPARE AF FORMS 2422 (MAINTENANCE ANALYSIS REFERRAL)	30
I321 INSTRUCT SYSTEM OPERATORS ON SYSTEM CHANGES OR PROBLEMS, SUCH AS EXTENDED DOWNTIME PROCEDURES	27
B19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	27
E118 PREPARE AIRCRAFT MISSION ANALYSIS REPORTS	26
I324 MAINTAIN SYSTEMS ADVISORY NOTICE (SAN) FILES	26
E126 PREPARE DISCREPANCIES PER SORTIE REPORTS	25
M421 ASSEMBLE DATA OR RECORDS FOR COMPUTATION OF STATISTICS, SUCH AS MEAN TIME BETWEEN FAILURE (MTBF)	24

MANAGERS drops only 1 percentage point. A review of tasks commonly performed by the group (see Table 8) reveals that over 50 percent of these personnel are involved in both supervisory and technical task performance. Thus, while Tables 5, 6, and 8 clearly show 7-skill level personnel are engaged in supervisory responsibilities, they also show the range of the job, in that these personnel are also technicians, performing a wide variety of maintenance data systems analysis technical tasks. To further highlight this dual technical/supervisory involvement, Table 9 lists representative task differences between DAFSC 39130/50 and 39170 personnel. While the difference between the skill levels is minimal in terms of technical task performance, career ladder progression is evident, as seen in the substantial percentage increases in supervisory tasks performed by the 7-skill level group.

DAFSCs 39190/CEM Code. The degree of diversity noted at the 3- and 5-skill levels essentially disappears at this level of performance, with supervisory, managerial, and evaluative responsibilities comprising the majority (57 percent) of these incumbent's job time (see Table 6). While supervisory responsibilities clearly dominate, these 9-skill and CEM Code level personnel are still somewhat involved in technical task performance, as seen in Tables 5 and 10. Table 5 indicates that 26 percent of the group is distributed across the more technical jobs within the career ladder, with the majority serving as AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS or MMICS/CAMS FUNCTIONAL SYSTEMS MANAGERS. (Only 2 percent are found in the DATA BASE MANAGERS job group, as opposed to 21 percent at the 7-skill level). Further, while Table 10 (which lists representative tasks performed by the group) clearly reveals a high degree of supervisory, managerial, and evaluative involvement, it also shows as many as 42 percent performing more technical tasks such as preparing written narratives on aircraft maintenance summaries and reviewing full mission capable rates (FMCR) for developing trends or problems. Overall, though, career ladder progression is clearly evident. The major difference between the job performed at this level and the 7-skill level seems to be an increased emphasis on supervisory, managerial, and evaluative tasks, together with a markedly decreased emphasis on data base management responsibilities (see Table 11).

### Summary

Career ladder progression is evident, with supervisory responsibilities becoming more prominent at the 7-skill, 9-skill, and CEM Code levels. Correspondingly, technical responsibilities become less prominent, but are still evident as high as the 9-skill and CEM Code levels. Low numbers of tasks performed by over 50 percent of the 3- and 5-skill level group and the diversity of the AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS job suggest a great deal of diversity for this career ladder group. The degree of diversity in the jobs performed, however, tapers off as career ladder members move into higher skill-levels within the ladder.

TABLE 8

REPRESENTATIVE TASKS PERFORMED BY DAFSC 39170 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 39170 (N=300)
B26 DRAFT CORRESPONDENCE	79
B21 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED PROBLEMS	64
C73 PREPARE AIRMAN PERFORMANCE REPORTS (APR)	63
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	61
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	61
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	58
N454 OPEN OR CLOSE REMOTE DEVICES	56
B19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	55
F165 EVALUATE MAINTENANCE DATA COLLECTION (MDC) DATA	54
A13 PREPARE OR UPDATE LOCAL OPERATING INSTRUCTIONS	53
B47 SUPERVISE MAINTENANCE SYSTEMS ANALYSIS SPECIALISTS (AFSC 39150)	52
F147 COMPILE DATA FOR AIRCRAFT SUMMARIES	48
I305 CONSTRUCT AIR FORCE ONLINE DATA SYSTEM (AFOLDS) INQUIRIES	47
F168 PREPARE AIRCRAFT STUDIES OR BRIEFINGS	45
E116 PREPARE AF FORMS 2422 (MAINTENANCE ANALYSIS REFERRAL)	44
F182 REVIEW FULL MISSION CAPABLE RATES (FMCR) FOR DEVELOPING TRENDS OR PROBLEMS	43
I306 COORDINATE COMPUTER TIME WITH DATA PROCESSING INSTALLATIONS (DPI) OR COMPUTER ROOMS	43
I309 COORDINATE SYSTEM HARDWARE PROBLEMS OR REPAIR WITH DPI OR USERS	43
F172 PREPARE WRITTEN NARRATIVES ON AIRCRAFT MAINTENANCE SUMMARIES	42
I324 MAINTAIN SYSTEMS ADVISORY NOTICE (SAN) FILES	42
D81 CONDUCT OJT	42
E134 PREPARE MAINTENANCE DATA COLLECTION REPORTS	41
M422 ASSEMBLE DATA OR RECORDS FOR MAINTENANCE SUMMARIES	38
K363 PREPARE MAINTENANCE SUMMARIES	37
I320 INITIATE, PREPARE, OR REVIEW DIFFICULTY REPORTS (DIREP)	35
I308 COORDINATE RECOVERY PROCEDURES WITH DPI OR USERS	35
I311 CORRECT INTERNAL FILE ERRORS	34
I310 COORDINATE WITH FUNCTIONAL MANAGERS TO ENSURE SYSTEM MANAGEMENT INTEGRITY	34
I334 VERIFY COMPUTER INPUTS FROM USERS	34
M421 ASSEMBLE DATA OR RECORDS FOR COMPUTATION OF STATISTICS, SUCH AS MEAN TIME BETWEEN FAILURE (MTBF)	33
F162 EVALUATE AEROSPACE VEHICLE EQUIPMENT STATUS DATA	33

TABLE 9

REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSC 39130/50  
AND DAFSC 39170 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 39130/50 (N=432)	DAFSC 39170 (N=300)	DIFF
K351 COLL-CT AIRCRAFT OR MISSILE SCHEDULING EFFECTIVENESS DATA	33	21	+12
F146 COMPILE AIRCRAFT SCHEDULING EFFECTIVENESS DATA	39	28	+11
K363 PREPARE MAINTENANCE SUMMARIES	47	37	+10
E126 PREPARE DISCREPANCIES PER SORTIE REPORTS	25	18	+7
K370 REVIEW SCHEDULING EFFECTIVENESS DATA	25	18	+7
E108 FILE SCHEDULED MAINTENANCE REPORTS	17	11	+6
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B26 DRAFT CORRESPONDENCE	33	79	-46
C73 PREPARE AIRMAN PERFORMANCE REPORTS (APR)	18	63	-45
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	16	61	-45
B21 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED PROBLEMS	20	64	-44
A15 SCHEDULE LEAVES OR PASSES	10	49	-39
A7 ESTABLISH WORK PRIORITIES	23	61	-38
A13 PREPARE OR UPDATE LOCAL OPERATING INSTRUCTIONS	16	53	-38
A10 PLAN OR SCHEDULE WORK ASSIGNMENTS	13	51	-37
B47 SUPERVISE MAINTENANCE SYSTEMS ANALYSIS SPECIALISTS (AFSC 39150)	15	52	-37
B22 DEVELOP WORK METHODS OR PROCEDURES	31	61	-30
B19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	27	55	-28

TABLE 10  
 REPRESENTATIVE TASKS PERFORMED BY DAFSC 39190 AND  
 CEM CODE PERSONNEL  
 (PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 39190/ CEM CODE (N=50)
B26 DRAFT CORRESPONDENCE	100
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	90
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	78
B21 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED PROBLEMS	74
C73 PREPARE AIRMAN PERFORMANCE REPORTS (APR)	74
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	68
A10 PLAN OR SCHEDULE WORK ASSIGNMENTS	68
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	68
A7 ESTABLISH WORK PRIORITIES	66
B22 DEVELOP WORK METHODS OR PROCEDURES	66
A12 PREPARE JOB DESCRIPTIONS	66
F168 PREPARE AIRCRAFT STUDIES OR BRIEFINGS	64
B49 SUPERVISE MAINTENANCE SYSTEMS ANALYSIS TECHNICIANS (AFSC 39170)	64
A15 SCHEDULE LEAVES OR PASSES	62
B19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	58
C68 EVALUATE SUGGESTIONS	58
C51 ANALYZE WORKLOAD REQUIREMENTS	58
B27 DRAFT OR REVISE JOB DESCRIPTIONS	58
C72 MAKE STAFF ASSISTANCE VISITS	56
C63 EVALUATE PERSONNEL ASSIGNMENTS	56
A13 PREPARE OR UPDATE LOCAL OPERATING INSTRUCTIONS	56
C60 EVALUATE INSPECTION REPORTS OR PROCEDURES	54
C55 EVALUATE COMPLIANCE WITH WORK STANDARDS	52
F150 CONDUCT BRIEFINGS ON AIRCRAFT MAINTENANCE PERFORMANCE	50
F165 EVALUATE MAINTENANCE DATA COLLECTION (MDC) DATA	48
F172 PREPARE WRITTEN NARRATIVES ON AIRCRAFT MAINTENANCE SUMMARIES	46
J335 ANALYZE PROPOSALS OR SUGGESTIONS FOR SYSTEM MODIFICATIONS	44
B50 SUPERVISE MILITARY PERSONNEL WITH AFSC OTHER THAN 391X0 OR 392X0	44
J338 COORDINATE SYSTEM DEVELOPMENT OR DESIGN WITH COMPUTER PROGRAMMERS, FUNCTIONAL MANAGERS, OR OTHER ANALYSTS	42
F182 REVIEW FULL MISSION CAPABLE RATES (FMCR) FOR DEVELOPING TRENDS OR PROBLEMS	42



TABLE 11

REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSC 39170  
AND DAFSC 39190/CEM CODE PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 39170 (N=300)	DAFSC 39190/ CEM CODE (N=50)	DIFF
I309 COORDINATE SYSTEM HARDWARE PROBLEMS OR REPAIR WITH DPI OR USERS	43	12	+31
I326 NOTIFY SYSTEM USERS OF STATUS OF UNSCHEDULED DOWNTIME FOR SYSTEMS, SUCH AS MMICS	42	12	+30
N454 OPEN OR CLOSE REMOTE DEVICES	56	30	+26
I328 PERFORM OPERATOR MAINTENANCE ON SYSTEM HARDWARE, SUCH AS REMOTES OR PRINTERS	30	4	+26
I318 INITIATE PERIODIC OFF-BASE REPORTS, SUCH AS REPORTS TO COMMAND OR HEADQUARTERS	29	4	+25
E134 PREPARE MAINTENANCE DATA COLLECTION (MDC) REPORTS	41	18	+23
I324 MAINTAIN SYSTEMS ADVISORY NOTICE (SAN) FILES	42	20	+22
I305 CONSTRUCT AIR FORCE ONLINE DATA SYSTEM (AFOLDS) INQUIRIES	47	28	+19
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B49 SUPERVISE MAINTENANCE SYSTEMS ANALYSIS TECHNICIANS (AFSC 39170)	26	64	-38
C63 EVALUATE PERSONNEL ASSIGNMENTS	21	56	-35
C68 EVALUATE SUGGESTIONS	25	58	-33
B38 PREPARE PERSONNEL ACTION REQUESTS	15	48	-33
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	58	90	-32
F12 PREPARE JOB DESCRIPTIONS	35	66	-31
C72 MAKE STAFF ASSISTANCE VISITS	26	56	-30
C60 EVALUATE INSPECTION REPORTS OR PROCEDURES	25	54	-29
C61 EVALUATE JOB DESCRIPTIONS	23	52	-29
C62 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	27	56	-29
C55 EVALUATE COMPLIANCE WITH WORK STANDARDS	24	52	-28
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	40	68	-28
J335 ANALYZE PROPOSALS OR SUGGESTIONS FOR SYSTEM MODIFICATIONS	19	44	-25

## ANALYSIS OF 391X0 AFR 39-1 SPECIALTY DESCRIPTIONS

Survey data by skill level were compared to the AFR 39-1 Specialty Descriptions for the Maintenance Data Systems Analysis Specialist, Technician, and Superintendent (39130/50, 39170, and 39190/CEM Code, respectively), all dated 30 April 1986. These descriptions are intended to give a broad overview of the duties and tasks performed in each skill level of the specialty.

Both the 3- and 5-skill level and 7-skill level descriptions accurately reflect the full range of duties and responsibilities performed by personnel at these levels. The 9-skill and CEM Code level description also appears complete, accurately portraying the full range of managerial as well as technical duties performed by these personnel.

### 391X0 TRAINING ANALYSIS

Occupational survey data provide one of the many sources of information which can be used to assist in the development of a training program relevant to the needs of personnel in their first-enlistment. Specifically, the primary factor used to review training programs is the percent of first-enlistment (1-48 months TAFMS) personnel performing specific tasks. Other considerations in training decisions include the overall description of the job being performed by first-enlistment personnel and their overall distribution across career ladder jobs, training emphasis and task difficulty ratings (previously explained in the SURVEY METHODOLOGY section of this report), subject-matter expert input, and the availability of training equipment or instructors. Normally, the percent of first-job (1-24 months TAFMS) personnel performing specific tasks would also be considered; however, these data were not used due to the low number of 391X0 first-job personnel responding to the survey (N=15).

This training analysis reviews the current Specialty Training Standard (STS) and Tentative Plan of Instruction (POI) for the 391X0 career ladder. Technical school personnel from Chanute Technical Training Center matched tasks from the job inventory to corresponding sections of the STS and Tentative POI for Course 3ABR39130 001. Occupational survey data for the matched tasks were then used to assess the appropriateness of the various items in the training documents. A complete computer listing displaying the percent members performing tasks, training emphasis and task difficulty ratings for each task, along with the STS and POI matchings, has been forwarded to the technical school for their use in further detailed reviews of the training documents. A summary of this information is presented below.

#### Training Emphasis and Task Difficulty Data

Training emphasis (TE) and task difficulty (TD) data are secondary factors that can assist technical school personnel in deciding what tasks should be emphasized in entry-level training. These ratings, based on the

judgments of senior career ladder NCOs, are collected to provide training personnel with a rank-ordering of those tasks considered important for first-term airman training (TE), along with a measure of how difficult those tasks are to learn (TD). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can then be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors, accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best left out of training for first-enlistment personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks. Various lists of tasks, accompanied by TE and TD ratings, are contained in the Training Extract package and should be reviewed in detail by technical school personnel. For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the SURVEY METHODOLOGY section of this report.

### First-Enlistment Personnel

In this study, there are 165 members in their first enlistment, representing 21 percent of all 391X0 personnel surveyed. The majority are assigned to TAC (29 percent), SAC (29 percent), MAC (12 percent), and USAFE (10 percent), and work primarily at the wing and squadron levels. Ninety percent report operating a mini- or microcomputer on the job, while 47 percent report programming these computers. All are qualified at either the 3- or 5-skill level.

As seen in Figure 3 (which displays the distribution of these personnel across specialty job groups), the majority of these first-enlistment members are found in two major jobs (AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS and DATA BASE MANAGERS), with 24 percent not grouping in any of the jobs identified. This large percentage of personnel not grouped indicates a great deal of diversity in the jobs performed by these first-enlistment personnel. The diversity of their job is further seen in Table 12, which lists representative tasks performed by these members. Only four tasks were performed by over 50 percent of the group, with only 62 percent performing the most commonly performed task. This suggests very little commonality among jobs held by these incumbents. The diversity of the group can best be explained by the fact that almost half (45 percent) are working as AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS (see Figure 3). As highlighted in the SPECIALTY JOBS section of this report, a high degree of diversity was noted within this job. Although members were following essentially the same analysis process, their everyday taskings were dependent on the needs of the particular squadron or wing to which they were assigned. Thus, with the majority of first-enlistment personnel found in this diverse group, the diversity of the group as a whole is affected. Since the first-enlistment group is the target for ABR training, this description is highlighted to provide a foundation for examining specialty entry-level training.

# DISTRIBUTION OF 391X0 FIRST-ENLISTMENT PERSONNEL ACROSS SPECIALTY JOB GROUPS (PERCENT MEMBERS PERFORMING)

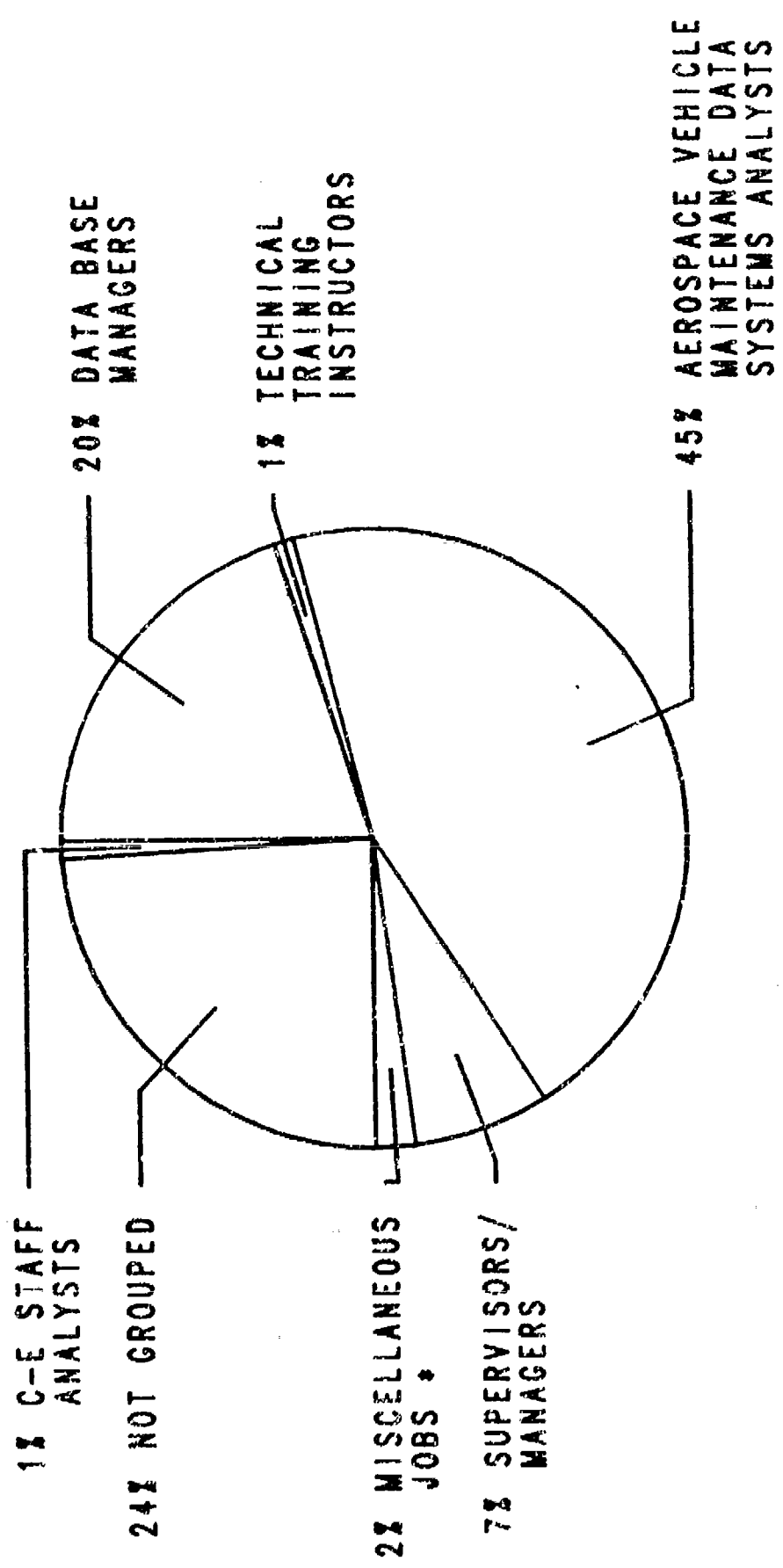


FIGURE 3

\* MISCELLANEOUS JOBS INCLUDE SPECIAL STUDIES ANALYSTS, TIME CHANGE MONITORS, AND PRODUCTION CONTROL PERSONNEL.

TABLE 12  
REPRESENTATIVE TASKS PERFORMED BY 391X0  
FIRST-ENLISTMENT PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=165)
N454 OPEN OR CLOSE REMOTE DEVICES	62
F147 COMPILE DATA FOR AIRCRAFT SUMMARIES	57
K363 PREPARE MAINTENANCE SUMMARIES	57
F165 EVALUATE MAINTENANCE DATA COLLECTION (MDC) DATA	52
M422 ASSEMBLE DATA OR RECORDS FOR MAINTENANCE SUMMARIES	47
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	47
E139 UPDATE COMPUTER LISTINGS	45
F168 PREPARE AIRCRAFT STUDIES OR BRIEFINGS	45
F146 COMPILE AIRCRAFT SCHEDULING EFFECTIVENESS DATA	41
E120 PREPARE AIRCRAFT OR MISSILE STATUS DATA	39
K351 COLLECT AIRCRAFT OR MISSILE SCHEDULING EFFECTIVENESS DATA	39
F182 REVIEW FULL MISSION CAPABLE RATES (FMCR) FOR DEVELOPING TRENDS OR PROBLEMS	39
E134 PREPARE MAINTENANCE DATA COLLECTION REPORTS	38
K368 REVIEW OR SPOT CHECK MAINTENANCE DATA COLLECTION (MDC) SOURCE DOCUMENTS FOR ACCURACY	37
F172 PREPARE WRITTEN NARRATIVES ON AIRCRAFT MAINTENANCE SUMMARIES	37
I326 NOTIFY SYSTEM USERS OF STATUS OF UNSCHEDULED DOWNTIME FOR SYSTEMS, SUCH AS MMICS	36
I305 CONSTRUCT AIR FORCE ONLINE DATA SYSTEM (AFOLDS) INQUIRIES	36
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	33
F162 EVALUATE AEROSPACE VEHICLE EQUIPMENT STATUS DATA	32
M421 ASSEMBLE DATA OR RECORDS FOR COMPUTATION OF STATISTICS, SUCH AS MEAN TIME BETWEEN FAILURE (MTBF)	30
E126 PREPARE DISCREPANCIES PER SORTIE REPORTS	30
I306 COORDINATE COMPUTER TIME WITH DATA PROCESSING INSTALLATIONS (DPI) OR COMPUTER ROOMS	30
E118 PREPARE AIRCRAFT MISSION ANALYSIS REPORTS	28
I309 COORDINATE SYSTEM HARDWARE PROBLEMS OR REPAIR WITH DPI OR USERS	27
B19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	27
B26 DRAFT CORRESPONDENCE	27
F176 REVIEW AEROSPACE VEHICLE MDC SOURCE DOCUMENTS FOR ACCURACY	25
K370 REVIEW SCHEDULING EFFECTIVENESS DATA	25
F144 AUDIT DAILY DATA INPUTS	24
I308 COORDINATE RECOVERY PROCEDURES WITH DPI OR USERS	24
I311 CORRECT INTERNAL FILE ERRORS	22

### Specialty Training Standard (STS)

A comprehensive review of the February 1986 STS for AFSC 391X0 compared STS elements with occupational survey data. STS elements containing general information common to all specialties were not reviewed. The remaining elements were reviewed in terms of the percent of either first-enlistment, 5-skill level, or 7-skill level personnel performing the matched tasks. This review identified 14 elements of the STS with matched tasks performed by less than 20 percent of any of the above career ladder groups, suggesting that a thorough review of the STS is in order. Examples of these elements, along with percent performing and TE and TD data, are displayed in Table 13. A complete listing of the elements is reflected in the 391X0 Training Extract published in conjunction with this report. Generally, the majority of unsupported elements were found in STS paragraphs 13 (Statistical Methods of Data Analysis) and 15 (Organizational Capabilities). It is interesting to note that, of the STS elements supported by survey data in these paragraphs, not one was matched with a task performed by over 23 percent of one of the above career ladder groups. Coupled with the high number of unsupported elements in each paragraph, this indicates there is very little support (in terms of the percent of first-enlistment, 5-skill level, and 7-skill level percent members performing) for retention of these paragraphs in the STS. Training personnel and subject-matter experts should review these paragraphs, in addition to the other elements not supported, to determine if criticality, safety, or some other consideration requires that they remain in the STS.

There were 18 nonsupervisory tasks specific to the 391X0 AFSC that were not matched to the STS and were performed by at least 20 percent of the personnel in either the first-enlistment, 5-skill level, or 7-skill level groups. As seen in Table 14, many of these tasks deal with assembling or compiling data for aircraft or maintenance summaries and reviewing various aerospace vehicle status and utilization reports for accuracy. Generally, such tasks not referenced should be covered by some existing element or a new element could be added to the STS. Training personnel should carefully review this list of unreferenced tasks to determine areas which might be appropriate for inclusion in future revisions of the STS.

### Plan of Instruction (POI)

Based on assistance from technical school subject-matter experts in matching the job inventory tasks to the Tentative 3ABR39130 001 POI, (dated 13 May 1986), occupational survey data were matched to related training objectives. The specific data examined included percent members performing data for first-enlistment personnel and the TE and TD ratings for the matched tasks.

Of the 60 POI objectives that were matched with survey data, 23 were not supported, as fewer than 30 percent of first-enlistment personnel indicated performing the matched tasks. This equates to 54 hours of course time. Examples of these objectives, along with percent members performing and TE and TD data, are displayed in Table 15, while a complete listing is reflected in the 391X0 Training Extract. In general, areas not supported due to low

TABLE 13

## EXAMPLES OF 391X0 STS ELEMENTS REQUIRING REVIEW

STS ELEMENT (WITH SELECTED SAMPLE TASKS)	PERCENT MEMBERS PERFORMING				TASK DIFF**
	TNG EMP*	1ST ENL (N=165)	DAFSC 39150 (N=376)	DAFSC 39170 (N=300)	
-----					
12c DEVELOP FRAMES					
-----					
1304 BUILD OR UPDATE LOCAL OR OPTIONAL FRAMES	2.46	5	10	15	6.69
-----					
13b(1) UTILIZE DESCRIPTIVE STATISTICS BY CONSTRUCTING FREQUENCY DISTRIBUTIONS					
-----					
H290 CONSTRUCT FREQUENCY DISTRIBUTION GRAPHS	3.60	10	9	14	5.63
H291 CONSTRUCT FREQUENCY TABLES	2.85	5	4	7	5.73
-----					
13b(5) UTILIZE DESCRIPTIVE STATISTICS BY CONDUCTING TIME SERIES ANALYSIS					
-----					
H294 PERFORM TIME SERIES (SECULAR TREND) ANALYSIS USING COMPUTERS	2.83	13	10	13	5.37
-----					
13c(4) UTILIZE DESCRIPTIVE STATISTICS BY APPLYING APPROPRIATE PARAMETRIC SIGNIFICANCE TESTS					
-----					
H242 CALCULATE LEVELS OF SIGNIFICANCE APPLYING PARAMETRIC TESTS USING COMPUTERS	2.74	7	6	13	5.79
-----					

\* Mean TE Rating is 1.51 and Standard Deviation is 1.31

\*\* Average TD Rating is 5.00 and Standard Deviation is 1.00

TABLE 13 (CONTINUED)

## EXAMPLES OF 391X0 STS ELEMENTS REQUIRING REVIEW

STS ELEMENT (WITH SELECTED SAMPLE TASKS)	PERCENT MEMBERS PERFORMING				TASK DIFF**
	TNG EMP*	1ST ENL (N=165)	DAFSC 39150 (N=376)	DAFSC 39170 (N=300)	
14c CALCULATE COST FACTORS					
1437 COMPUTE OR DETERMINE MAN-HOUR COST FACTORS	3.21	3	2	12	5.57
15a(3) DETERMINE MAINTENANCE CAPABILITIES FOR FACILITIES					
M431 COMPUTE OR DETERMINE AIRCRAFT OR MISSILE FACILITY CAPABILITIES	2.96	6	6	6	5.82
15b(1) DETERMINE MISSION EQUIPMENT AVAILABILITY					
M433 COMPUTE OR DETERMINE AIRCRAFT OR MISSILE MISSION EQUIPMENT AVAILABILITIES	3.23	5	4	5	5.93

\* Mean TE Rating is 1.51 and Standard Deviation is 1.31

\*\* Average TD Rating is 5.00 and Standard Deviation is 1.00



TABLE 14

TASKS PERFORMED BY 20 PERCENT OR MORE GROUP MEMBERS AND NOT  
REFERENCED TO THE 391X0 STS

TASKS	TNG EMP*	PERCENT MEMBERS PERFORMING			TASK DIFF**
		1ST ENL (N=165)	DAFSC 39150 (N=376)	DAFSC 39170 (N=300)	
F147 COMPILE DATA FOR AIRCRAFT SUMMARIES	5.70	57	53	48	5.59
M422 ASSEMBLE DATA OR RECORDS FOR MAINTENANCE SUMMARIES	5.06	47	36	38	5.14
K363 PREPARE MAINTENANCE SUMMARIES	4.58	56	47	37	5.61
I315 IDENTIFY OR ANALYZE INTERNAL FILE ERRORS	3.97	17	21	29	7.03
F178 REVIEW AIRCRAFT EQUIPMENT STATUS REPORTS FOR ACCURACY	3.94	19	19	24	4.94
F179 REVIEW AIRCRAFT EQUIPMENT UTILIZATION REPORTS FOR ACCURACY	3.84	14	13	22	4.94
F175 REVIEW AEROSPACE VEHICLE MAN-HOUR UTILIZATION REPORTS FOR ACCURACY	3.81	14	16	24	5.13
F174 REVIEW AEROSPACE VEHICLE EQUIPMENT UTILIZATION REPORTS FOR ACCURACY	3.76	17	18	27	5.23
F177 REVIEW AEROSPACE VEHICLE STATUS REPORTS FOR ACCURACY	3.74	24	25	29	4.99
E135 PREPARE RECORD OF ANALYSIS STUDIES	3.73	22	25	32	4.73
E140 UPDATE MAINTENANCE CAPABILITY COMPUTATION RECORDS	3.20	19	17	22	5.25
E120 PREPARE AIRCRAFT OR MISSILE STATUS DATA	3.12	39	32	34	5.15
E119 PREPARE AIRCRAFT OR MISSILE MAINTENANCE MANAGEMENT REPORTS	2.59	24	20	24	5.36
I330 PREPARE OR SUBMIT LOCAL DATA AUTOMATION REQUIREMENTS OR DATA AUTOMATION PROPOSALS	2.37	7	12	21	5.05
3340 DESIGN OR WRITE PROGRAMS FOR SYSTEMS OTHER THAN MMICS	2.12	16	14	23	7.27

\* Mean TF Rating is 1.51 and Standard Deviation is 1.31

\*\* Average TD Rating is 5.00 and Standard Deviation is 1.00

TABLE 15

EXAMPLES OF POI OBJECTIVES REFLECTING LOW 391X0 FIRST-ENLISTMENT  
TASK PERFORMANCE  
(LESS THAN 30 PERCENT RESPONDING)

POI OBJECTIVE (WITH SELECTED SAMPLE TASKS)	TNG EMP*	1ST ENL (N=165)	TASK DIFF**
----- IIIIID. USING AFM 66-278 VOL I (PHASE IV), REMOTE TERMINAL AND STUDENT PREPARED AF FORM 1530, RETRIEVE ON-LINE MMICS PRODUCTS -----	2.46	5	6.69
I304 BUILD OR UPDATE LOCAL OR OPTIONAL FRAMES -----			
VIC. WITHOUT REFERENCE MATERIALS, IDENTIFY THE FUNCTION OF THE DELETE HISTORY (TRICS) -----	3.56	18	5.19
I316 INITIATE DELETE HISTORY (DLH) PROCEDURES -----			
X12A. GIVEN SELECTED STATISTICAL DATA, CONSTRUCT AN UNGROUPED FREQUENCY DISTRIBUTION -----	3.60 2.85	10 5	5.63 5.73
H290 CONSTRUCT FREQUENCY DISTRIBUTION GRAPHS H291 CONSTRUCT FREQUENCY TABLES -----			

\* Mean TE Rating is 1.51 and Standard Deviation is 1.31

\*\* Average TD Rating is 5.00 and Standard Deviation is 1.00

TABLE 15 (CONTINUED)

EXAMPLES OF POI OBJECTIVES REFLECTING LOW 391X0 FIRST-ENLISTMENT  
TASK PERFORMANCE  
(LESS THAN 30 PERCENT RESPONDING)

POI OBJECTIVE (WITH SELECTED SAMPLE TASKS)	TNG EMP*	1ST ENL (N=165)	TASK DIFF**
----- X15A. WITHOUT REFERENCE MATERIALS, IDENTIFY THE BASIC FACTS ABOUT DETERMINING MANPOWER EQUIPMENT AND FACILITY CAPABILITIES -----			
M430 COMPUTE OR DETERMINE AIRCRAFT OR MISSILE EQUIPMENT CAPABILITIES	4.44	20	5.97
M431 COMPUTE OR DETERMINE AIRCRAFT OR MISSILE FACILITY REQUIREMENTS	2.96	6	5.82
-----			
X113A. GIVEN A PARTIAL MONTHLY MAINTENANCE PLAN, APPLICABLE COMPLETED SCHEDULED MAINTENANCE ACTION DATA, AND AN ELECTRONIC CALCULATOR, DETERMINE MAINTENANCE ACTION SCHEDULING EFFECTIVENESS RATES -----			
K370 REVIEW SCHEDULING EFFECTIVENESS DATA -----	2.57	26	4.57

\* Mean TE Rating is 1.51 and Standard Deviation is 1.31

\*\* Average TD Rating is 5.00 and Standard Deviation is 1.00

percentages of personnel performing included: MMICS Support Subsystem, MMICS Recovery/Pseudo Processing, Basic Statistics and Capabilities, and Data Presentation (cost factors and maintenance performance rates).

In accordance with ATCR 52-22, and in the interest of cost-effectiveness, objectives where the probability of first-enlistment performance is less than 30 percent should not be taught in a resident training course without further justification. Although it is apparent that, due to diversity of the career ladder (especially among personnel in their first-enlistment), a completely cost-effective training course may not be possible, it is obvious that some sort of technical training is necessary. Therefore, it is suggested that training management personnel consider another set of performance data in evaluating the Tentative 3ABR39130 001 POI. Specifically, the percent performing data for those first-enlistment personnel in the two major job groups identified in the SPECIALTY JOBS section of this report (AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS and DATA BASE MANAGERS) may lend support for retaining otherwise unsubstantiated objectives in the POI. Examples of these data matched the unsupported POI objectives are found in Table 16. Using this approach, 14 (versus 23) objectives fail to be supported by the survey data. These objectives include:

- IIII1D. USING AFM 66-278 VOL I (PHASE IV), REMOTE TERMINAL, AND STUDENT PREPARED AF FORM 1530, RETRIEVE ON-LINE MMICS PRODUCTS (5 Hours)
- XI2A. GIVEN SELECTED STATISTICAL DATA, CONSTRUCT AN UNGROUPED FREQUENCY DISTRIBUTION (1 Hour)
- XI3A. WITHOUT REFERENCE MATERIALS, IDENTIFY CHARACTERISTICS OF THE MEASURES OF CENTRAL TENDENCY (1.5 Hours)
- XI3B. GIVEN SELECTED STATISTICAL DATA, AN ELECTRONIC CALCULATOR, AND A FORMULA SHEET, CALCULATE THE MEASURES OF CENTRAL TENDENCY (1.5 Hours)
- XI4A. WITHOUT REFERENCE MATERIALS, IDENTIFY CHARACTERISTICS OF SELECTED MEASURES OF VARIABILITY (2 Hours)
- XI4B. GIVEN A FORMULA SHEET, AN ELECTRONIC CALCULATOR, SELECTED STATISTICAL DATA, AND AN EXAMPLE PROBLEM, CALCULATE MEASURES OF VARIABILITY (6 Hours)
- XI5A. WITHOUT REFERENCE MATERIALS, IDENTIFY THE BASIC FACTS ABOUT DETERMINING MANPOWER EQUIPMENT AND FACILITY CAPABILITIES (2 Hours)
- XI5B. WITHOUT REFERENCE MATERIALS, IDENTIFY BASIC FACTS ABOUT DETERMINING MISSION EQUIPMENT AVAILABILITY (1 Hour)
- XI5D. WITHOUT REFERENCE MATERIALS, IDENTIFY BASIC FACTS ABOUT DETERMINING FACILITY REQUIREMENTS (1 Hour)

TABLE 16

EXAMPLES OF 391X0 POI OBJECTIVES MATCHED WITH SPECIALTY JOB GROUP DATA  
(PERCENT FIRST-ENLISTMENT PERSONNEL PERFORMING)

POI OBJECTIVE	SELECTED MATCHED TASKS	TNG EMP*	AEROSPACE VEHICLE MAINTENANCE		TASK DIFF**
			DATA SYS ANALYSTS	DATA BASE MANAGERS	
IIIID.	I304 BUILD OR UPDATE LOCAL OR OPTIONAL FRAMES	2.46	1	12	6.69
VIC.	I316 INITIATE DELETE HISTORY (DLH) PROCEDURES	3.56	4	73	5.19
XI2A.	H290 CONSTRUCT FREQUENCY DISTRIBUTION GRAPHS	3.60	8	3	5.63
	H291 CONSTRUCT FREQUENCY TABLES	2.85	3	0	5.73
XI5A.	M430 COMPUTE OR DETERMINE AIRCRAFT OR MISSILE EQUIPMENT CAPABILITIES	4.44	25	15	5.97
	M431 COMPUTE OR DETERMINE AIRCRAFT OR MISSILE FACILITY CAPABILITIES	2.96	5	3	5.82
XII3A.	K370 REVIEW SCHEDULING EFFECTIVENESS DATA	2.57	42	6	4.57

\* Mean TE Rating is 1.51 and Standard Deviation is 1.31

\*\* Average TD Rating is 5.00 and Standard Deviation is 1.00

- XI5E. WITHOUT REFERENCE MATERIALS, IDENTIFY BASIC FACTS ABOUT PROJECTING MISSION MAINTENANCE CAPABILITIES (1 Hour)
- XII2A. GIVEN MAINTENANCE MAN-HOUR DATA AND AN ELECTRONIC CALCULATOR, DETERMINE JOB AVERAGE COST FACTORS (1 Hour)
- XII2C. GIVEN A MAINTENANCE JOB STANDARD, CREW PERFORMANCE DATA, AND AN ELECTRONIC CALCULATOR, DETERMINE JOB PERFORMANCE EFFICIENCY COST FACTORS (1 Hour)
- XII3B. GIVEN PERFORMANCE DATA AND AN ELECTRONIC CALCULATOR, DETERMINE MEAN TIME BETWEEN FAILURE FOR SELECTED EQUIPMENT COMPONENTS (3 Hours)
- XII3D. GIVEN PERFORMANCE DATA AND AN ELECTRONIC CALCULATOR, DETERMINE SYSTEM RELIABILITY RATES FOR SELECTED AIRCRAFT SYSTEMS (1.5 Hours)

These objectives, along with any others which are weakly supported by survey data, should be given serious consideration for deletion by training management personnel. Interestingly, the majority of tasks that were matched to the unsupported POI objectives carried high TE ratings, suggesting that senior NCOs in the career ladder feel some type of training in these areas is appropriate. Given the low percentages of first-enlistment personnel performing the tasks, however, this training might best be removed from the resident course and made a part of a formal OJT program.

Fourteen nonsupervisory tasks which were performed by over 30 percent of first-enlistment personnel were not matched to the POI. These tasks are listed in Table 17. Several of the tasks deal with preparing and assembling data for aircraft or maintenance summaries. All of the tasks have high, if not extremely high, TE ratings, and above average to high TD ratings. Training personnel should carefully review this list of unreferenced tasks to determine the necessity for training and the most effective method to accomplish it.

#### AFSC 391X0 MAJCOM AND CONUS-OVERSEAS GROUP COMPARISONS

Tasks performed and background data for personnel of the major commands (MAJCOM) with the largest populations were compared to determine whether job content varied as a function of MAJCOM assignment. Table 18 displays the relative percent time spent by 391X0 personnel across these MAJCOMs by duty groups.

Generally, the jobs performed across the majority of commands were similar, with the largest percentage of duty time in most commands committed to the performance of tasks involving aerospace vehicle maintenance data systems

TABLE 17

TASKS NOT REFERENCED TO POI 3ABR39130 001 WITH ABOVE AVERAGE TO  
HIGH TE AND OVER 30 PERCENT MEMBERS PERFORMING

TASKS	TNG EMP*	1ST ENL (N=165)	TASK DIFF**
F165 EVALJATE MAINTENANCE DATA COLLECTION (MDC) DATA	6.03	52	5.41
F147 COMPILE DATA FOR AIRCRAFT SUMMARIES	5.70	57	5.59
F168 PREPARE AIRCRAFT STUDIES OR BRIEFINGS	5.49	45	6.20
F172 PREPARE WRITTEN NARRATIVES ON AIRCRAFT MAINTENANCE SUMMARIES	5.14	37	6.12
M422 ASSEMBLE DATA OR RECORDS FOR MAINTENANCE SUMMARIES	5.06	47	5.14
E134 PREPARE MAINTENANCE DATA COLLECTION REPORTS	4.88	38	4.44
F182 REVIEW FULL MISSION CAPABLE RATES (FMCR) FOR DEVELOPING TRENDS OR PROBLEMS	4.77	39	5.45
K363 PREPARE MAINTENANCE SUMMARIES	4.58	50	5.61
F162 EVALUATE AEROSPACE VEHICLE EQUIPMENT STATUS DATA	4.09	32	5.18
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	4.01	46	4.76
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	3.90	33	6.40
E139 UPDATE COMPUTER LISTINGS	3.68	45	4.17
E120 PREPARE AIRCRAFT OR MISSILE STATUS DATA	3.12	39	5.15
E126 PREPARE DISCREPANCIES PER SORTIE REPORTS	2.85	30	4.65

\* Mean TE Rating is 1.51 and Standard Deviation is 1.31

\*\* Average TD Rating is 5.00 and Standard Deviation is 1.00

TABLE 18

RELATIVE PERCENT TIME SPENT ON DUTIES BY 391XO MAJOR COMMAND GROUPS  
(PERCENT MEMBERS)

DUTIES	TAC (N=216)	SAC (N=188)	MAC (N=98)	USAF (N=87)	AFCC (N=50)	ATC (N=47)	PACAF (N=38)	AFSC (N=31)
A. ORGANIZING AND PLANNING	4	4	5	5	5	4	4	3
B. DIRECTING AND IMPLEMENTING	11	12	13	13	11	11	12	9
C. INSPECTING AND EVALUATING	6	6	6	6	8	7	8	7
D. TRAINING	3	4	4	3	3	23	3	3
E. PREPARING, UPDATING, AND FILING FORMS, RECORDS, AND REPORTS	12	10	11	10	7	12	11	13
F. PERFORMING AEROSPACE VEHICLE DATA FUNCTIONS	21	18	16	18	1	11	18	23
G. PERFORMING COMMUNICATIONS ELECTRONIC METEOROLOGICAL (CEM) FUNCTIONS	2	*	*	1	15	*	*	1
H. PERFORMING GENERAL CALCULATIONS AND ANALYSIS FUNCTIONS	5	10	9	4	3	5	5	7
I. PERFORMING FILES MAINTENANCE FUNCTIONS	16	15	15	19	20	12	18	13
J. PERFORMING SYSTEMS ANALYSIS AND DESIGN FUNCTIONS	2	3	3	2	13	4	3	1
K. MAINTAINING MAINTENANCE DOCUMENTATION AND RECORDS	7	6	7	8	3	3	5	7
L. PLANNING AND SCHEDULING MAINTENANCE	1	2	2	2	*	*	2	2
M. COMPUTING AND DETERMINING INFORMATION	5	6	4	5	1	4	5	4
N. MANAGING AND UPDATING AUTOMATED MAINTENANCE RECORDS	4	3	3	3	7	3	2	2
O. PROCESSING SHOP WORK	*	*	*	*	*	*	3	4
P. CONTROLLING MAINTENANCE	*	*	*	*	1	0	*	0
Q. PERFORMING MOBILITY SUPPORT FUNCTIONS	*	*	*	*	*	*	*	*

\* Less than 1 percent



analysis, files maintenance (data base management), and administrative functions (Duties E, F, and I). SAC and MAC personnel were distinguished from the other commands to some degree by the relative amount of duty time spent performing general calculations and analysis functions (Duty H). As expected, ATC personnel devoted more of their duty time to training functions (Duty D), reflecting those personnel serving as technical training instructors. The job performed by AFCC personnel, however, was notably different than the majority of other MAJCOM personnel surveyed. As seen in Table 18, a substantial percentage of their duty time was spent performing Communications-Electronics (C-E) and Systems Analysis and Design functions as compared to other MAJCOM personnel surveyed (Duties G and J). While spending an equivalent amount of time performing files maintenance (data base management) functions, only 1 percent of their job time is devoted to tasks involving aerospace vehicle maintenance data systems analysis.

A similar comparison of 391X0 5-skill level CONUS and overseas groups revealed little difference in the jobs performed by these groups.

### SECTION III

#### ANALYSIS OF 392X0 DAFSC GROUPS

As explained in Section II, data pertaining to DAFSC groups is important to the analysis of each career ladder. The distribution of 392X0 skill-level groups across career ladder jobs is displayed in Table 19, while Table 20 displays the relative percent time spent on each duty across the skill-level groups. As personnel progress upward through the skill levels, the amount of time spent performing supervisory and managerial tasks (Duties A, B, and C) increases. Correspondingly, time spent on duties involving the technical tasks of the career ladder generally declines, although 7-skill level personnel are still very involved in technical task performance.

Specific skill-level groups are discussed below. Since a comparison of duty and task performance between DAFSCs 39230 and 39250 indicated no substantial difference in the jobs they perform, they will be discussed as a combined group. Similarly, DAFSC 39290 and CEM Code 39200 were also combined for reporting purposes.

#### Skill Level Descriptions

DAFSCs 39230/50. The 842 airmen in the 3- and 5-skill level group (representing 63 percent of all 392X0 personnel surveyed) perform an average of 39 tasks, with 46 tasks accounting for approximately 50 percent of their job time. Overall, there appears to be a great deal of diversity in the jobs performed by these personnel. For example, as seen in Table 21 (which lists

TABLE 19

DISTRIBUTION OF 392X0 DAFSC GROUPS ACROSS CAREER LADDER JOBS  
(PERCENT MEMBERS)\*

CAREER LADDER JOBS	DAFSC 39230/50 (N=842)	DAFSC 39270 (N=434)	DAFSC 39290/CEM CODE (N=52)
I. AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS (N=210)	**	**	0
II. DATA BASE MANAGERS (N=161)	0	0	0
III. MMICS/CAMS FUNCTIONAL SYSTEMS MANAGERS (N=16)	0	0	4
IV. SPECIAL STUDIES ANALYSTS (N=6)	0	0	0
V. HQ AFOTEC/USAF TAWC PERSONNEL (N=5)	0	0	0
VI. OPERATIONAL TEST AND EVALUATION TEAM ANALYSTS (N=10)	0	0	0
VII. C-E STAFF ANALYSTS (N=17)	0	0	0
VIII. PLANS AND SCHEDULING PERSONNEL (N=560)	43	45	12
IX. TIME CHANGE MONITORS (N=36)	4	**	0
X. TCTO MONITORS (N=62)	7	2	0
XI. CEMS DOCUMENTATION PERSONNEL (N=85)	8	5	0
XII. PRODUCTION CONTROL PERSONNEL (N=218)	18	15	2
XIII. MAJCOM AYDOS (N=5)	0	**	4
XIV. TECHNICAL TRAINING INSTRUCTORS (N=23)	1	**	0
XV. SUPERVISORS/MANAGERS (N=333)	2	16	75
NOT GROUPED	18	16	4

\* Columns may not add to 100 percent due to rounding

\*\* Less than 1 percent

TABLE 20

## AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY 392XO DAFSC GROUPS

DUTIES	DAFSC 39230/50 (N=842)	DAFSC 39270 (N=434)	DAFSC 39290/CEM CODE (N=52)
A. ORGANIZING AND PLANNING	3	7	13
B. DIRECTING AND IMPLEMENTING	5	14	23
C. INSPECTING AND EVALUATING	2	7	19
D. TRAINING	3	6	6
E. PREPARING, UPDATING, AND FILING FORMS, RECORDS, AND REPORTS	5	5	3
F. PERFORMING AEROSPACE VEHICLE DATA FUNCTIONS	4	4	8
G. PERFORMING COMMUNICATIONS ELECTRONIC METEOROLOGICAL (CEM) FUNCTIONS	*	*	*
H. PERFORMING GENERAL CALCULATIONS AND ANALYSIS FUNCTIONS	*	*	*
I. PERFORMING FILES MAINTENANCE FUNCTIONS	*	*	1
J. PERFORMING SYSTEMS ANALYSIS AND DESIGN FUNCTIONS	*	*	3
K. MAINTAINING MAINTENANCE DOCUMENTATION AND RECORDS	17	11	4
L. PLANNING AND SCHEDULING MAINTENANCE	26	23	12
M. COMPUTING AND DETERMINING INFORMATION	1	2	1
N. MANAGING AND UPDATING AUTOMATED MAINTENANCE RECORDS	15	9	2
O. PROCESSING SHOP WORK	15	10	2
P. CONTROLLING MAINTENANCE	3	2	*
Q. PERFORMING MOBILITY SUPPORT FUNCTIONS	*	*	*

\* Less than 1 percent

TABLE 21  
 REPRESENTATIVE TASKS PERFORMED BY DAFSC 39230 AND  
 39250 PERSONNEL  
 (PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 39230/50 (N=842)
N454 OPEN OR CLOSE REMOTE DEVICES	70
E139 UPDATE COMPUTER LISTINGS	63
L378 ASSIGN INDIVIDUAL JOB CONTROL NUMBERS FOR PLANNED MAINTENANCE	57
N462 UPDATE INSPECTION OR TIME CHANGE REQUIREMENTS USING REMOTE DEVICES	49
L398 INITIATE SCHEDULED INSPECTIONS	46
L414 SCHEDULE ACCOMPLISHMENT OF TCTO	45
L395 DISTRIBUTE MAINTENANCE PLANS OR SCHEDULES	43
L375 ADJUST SCHEDULES TO MEET EMERGENCY OR PRIORITY MAINTENANCE REQUIREMENTS	43
K353 CONDUCT AUTOMATED RECORDS REVIEWS	42
N447 LOAD DISCREPANCIES INTO SYSTEM RECORDS	41
K371 REVIEW TCTO STATUS REPORTS	41
L406 POST SCHEDULING INFORMATION ONTO VISUAL MEDIA, SUCH AS BOARDS OR CHARTS	40
N444 FORECAST INSPECTION OR TIME CHANGE REQUIREMENTS USING REMOTE DEVICES	40
N463 UPDATE TCTO STATUS INFORMATION USING REMOTE DEVICES	39
N460 UPDATE DISCREPANCY DATA USING REMOTE DEVICES	39
L382 CONDUCT OR ATTEND DAILY MAINTENANCE PLANNING MEETINGS	39
L418 SCHEDULE REPLACEMENT OF TIME CHANGE ITEMS	39
L407 PREPARE INSPECTION PACKAGES	38
K373 UPDATE TCTO CHANGES OR REPORTS	37
N448 LOAD INITIAL INSPECTION OR TIME CHANGE REQUIREMENTS INTO SYSTEM RECORDS	37
P510 ASSIGN JOB CONTROL NUMBERS TO UNSCHEDULED MAINTENANCE JOBS	36
K357 INITIATE TIME CHANGE ACTIONS	36
K356 INITIATE OR MAINTAIN MASTER ID LISTINGS	34
L384 COORDINATE FLYING/UTILIZATION OR MAINTENANCE SCHEDULING CHANGES WITH ACTION AGENCIES	33
L410 PREPLAN DAILY MAINTENANCE	32
L394 DEVELOP WEEKLY UTILIZATION OR MAINTENANCE SCHEDULES FOR AEROSPACE VEHICLES	31
L411 PROJECT MAINTENANCE REQUIREMENTS	31
L379 ASSIGN OR ADJUST PRIORITIES FOR PLANNED OR PREPLANNED MAINTENANCE	31
L415 SCHEDULE AEROSPACE VEHICLE INSPECTIONS	29
0465 ASSIGN JOB CONTROL NUMBERS FOR OFF-EQUIPMENT WORK	25

representative tasks performed by the group), only three tasks are performed by over 50 percent of these personnel, with only 70 percent performing the most commonly performed task. This suggests there is very little commonality among jobs held by these incumbents. This fact is further highlighted in Table 19, which displays the distribution of DAFSC group members across career ladder jobs. Overall, 3- and 5-skill level personnel were found in five of the six jobs that were identified as specific to the 392X0 AFSC (PLANS AND SCHEDULING PERSONNEL, TIME CHANGE MONITORS, TCTO MONITORS, CEMS DOCUMENTATION PERSONNEL, and PRODUCTION CONTROL PERSONNEL). Although the majority (43 percent) of these personnel are clearly working as PLANS AND SCHEDULING PERSONNEL, the fact that they are distributed across the majority of 392X0 jobs identified adds to the diversity of the group as a whole. Additionally, Table 19 indicates that 18 percent of these personnel were not found in any of the jobs identified, again suggesting a great deal of diversity in the jobs performed by these members. A similar pattern of diversity is also evident when reviewing the relative percent time spent on various duties oriented toward AFSC 392X0 functions (see Table 20, Duties K, L, N, and O). Again, 3- and 5-skill level members are spending considerable amounts of time across each duty versus concentrating on only a few duties.

DAFSC 39270. At the 7-skill level, the degree of diversity noted at the lower skill levels begins to taper off and the job broadens with the addition of supervisory responsibilities to technical task performance (an average of 61 tasks are performed versus 39). Yet, while 78 percent of the group report some level of supervision, only 39 percent of their duty time is devoted to performing tasks in the typical supervisory, managerial, and administrative duties (see Table 20, Duties A through E). Further, only 16 percent of the group are found in the SUPERVISORS/MANAGERS job group identified in the SPECIALTY JOBS section of this report (the one job that was predominantly supervisory in nature). In fact, while the percentage of 7-skill level personnel working as TIME CHANGE MONITORS, TCTO MONITORS, CEMS DOCUMENTATION PERSONNEL, and PRODUCTION CONTROL PERSONNEL decreases, the percentage working as PLANS AND SCHEDULING PERSONNEL actually increases from 43 to 45 percent (see Table 19). This reflects the fact that a large number of 392X0 personnel who grouped into the PLANS AND SCHEDULING cluster were working as NCOICs of Plans/Scheduling or Plans/Scheduling/Documentation, and in that capacity, were performing a large number of technical tasks in addition to their supervisory responsibilities. A review of tasks commonly performed by the group (see Table 22) reveals that, while the responsibility for supervision and management is quite clear, over 40 percent of these 7-skill level personnel are still performing technical tasks such as scheduling the accomplishment of TCTOs and developing weekly utilization or maintenance schedules for aerospace vehicles. Thus, while Tables 19, 20, and 22 clearly indicate that 7-skill level personnel are engaged in supervisory/managerial functions, they also reflect the range of the job, in that these personnel are also technicians, performing a wide variety of maintenance scheduling technical tasks. To further highlight this dual technical/supervisory involvement, Table 23 lists representative task differences between DAFSC 39230/50 and DAFSC 39270 personnel. While the difference between the skill levels is minimal in terms of technical task performance, career ladder progression is evident, as seen in the substantial percentage increases in supervisory/managerial tasks performed by the 7-skill level group.

TABLE 22

REPRESENTATIVE TASKS PERFORMED BY DAFSC 39270 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 39270 (N=434)
C73 PREPARE AIRMAN PERFORMANCE REPORTS (APR)	73
B21 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	71
N454 OPEN OR CLOSE REMOTE DEVICES	65
B44 SUPERVISE MAINTENANCE SCHEDULING SPECIALISTS (AFSC 39250)	61
A10 PLAN OR SCHEDULE WORK ASSIGNMENTS	60
A7 ESTABLISH WORK PRIORITIES	59
B22 DEVELOP WORK METHODS OR PROCEDURES	59
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	58
B26 DRAFT CORRESPONDENCE	56
L382 CONDUCT OR ATTEND DAILY MAINTENANCE PLANNING MEETINGS	54
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	54
D97 PREPARE OR UPDATE TRAINING RECORDS	54
L375 ADJUST SCHEDULES TO MEET EMERGENCY OR PRIORITY MAINTENANCE REQUIREMENTS	53
L378 ASSIGN INDIVIDUAL JOB CONTROL NUMBERS FOR PLANNED MAINTENANCE	52
B19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	47
K371 REVIEW TCTO STATUS REPORTS	47
D81 CONDUCT OJT	47
L384 COORDINATE FLYING/UTILIZATION OR MAINTENANCE SCHEDULING CHANGES WITH ACTION AGENCIES	46
L414 SCHEDULE ACCOMPLISHMENT OF TCTO	46
N462 UPDATE INSPECTION OR TIME CHANGE REQUIREMENTS USING REMOTE DEVICES	45
L398 INITIATE SCHEDULED INSPECTIONS	45
L406 POST SCHEDULING INFORMATION ONTO VISUAL MEDIA, SUCH AS BOARDS OR CHARTS	44
L418 SCHEDULE REPLACEMENT OF TIME CHANGE ITEMS	44
K353 CONDUCT AUTOMATED RECORDS REVIEWS	44
L376 ADJUST SCHEDULES TO MEET EMERGENCY OR PRIORITY OPTIONAL OR FLYING REQUIREMENTS	43
K370 REVIEW SCHEDULING EFFECTIVENESS DATA	42
L394 DEVELOP WEEKLY UTILIZATION OR MAINTENANCE SCHEDULES FOR AEROSPACE VEHICLES	40
L379 ASSIGN OR ADJUST PRIORITIES FOR PLANNED OR PREPLANNED MAINTENANCE	40
L385 COORDINATE MAINTENANCE REQUIREMENTS WITH OPERATIONS	39
L383 CONDUCT PREINSPECTION MEETINGS	39
L407 PREPARE INSPECTION PACKAGES	38
L410 PREPLAN DAILY MAINTENANCE	37
K357 INITIATE TIME CHANGE ACTIONS	36

TABLE 23

REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSC 39230/50  
AND DAFSC 39270 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 39230/50 (N=842)	DAFSC 39270 (N=434)	DIFF
P510 ASSIGN JOB CONTROL NUMBERS TO UNSCHEDULED MAINTENANCE JOBS	36	29	+ 6
L399 MAINTAIN MANUAL DELAYED DISCREPANCY FILES	29	23	+ 6
K358 MAINTAIN MANUAL RECORDS OF RECURRING INSPECTION TIMES OR DATES	33	28	+ 5
L378 ASSIGN INDIVIDUAL JOB CONTROL NUMBERS FOR PLANNED MAINTENANCE	57	52	+ 5
N454 OPEN OR CLOSE REMOTE DEVICES	70	65	+ 5
-----			
C73 PREPARE AIRMAN PERFORMANCE REPORTS (APR)	73	73	-57
B21 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	16	71	-53
B44 SUPERVISE MAINTENANCE SCHEDULING SPECIALISTS (AFSC 39250)	12	61	-49
A15 SCHEDULE LEAVES OR PASSES	5	47	-42
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	13	54	-41
D97 PREPARE OR UPDATE TRAINING RECORDS	13	54	-41
B26 DRAFT CORRESPONDENCE	16	56	-40
B22 DEVELOP WORK METHODS OR PROCEDURES	24	59	-35
D81 CONDUCT OJT	17	47	-30
F19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	18	47	-29
A10 PLAN OR SCHEDULE WORK ASSIGNMENTS	36	60	-24
A7 ESTABLISH WORK PRIORITIES	35	59	-24

DAFSCs 39290/CEM Code. The degree of diversity noted at the 3- and 5-skill levels essentially disappears at this level of performance, with supervisory, managerial, and administrative responsibilities comprising the majority (64 percent) of these incumbents' job time (see Table 20). This is further reflected in the fact that 75 percent of these personnel are found in the SUPERVISORS/MANAGERS job group identified in the SPECIALTY JOBS section of this report (see Table 19), while those tasks representative of the group as a whole are clearly supervisory/managerial in nature (see Table 24). Table 25 displays representative task differences between this group and the 7-skill level group just discussed. A review of this table indicates that career ladder progression is clear, as the percent of 9-skill and CEM Code level personnel performing supervisory/managerial tasks increases, while the percent performing technical tasks definitely declines.

### Summary

Career ladder progression is well defined, with personnel at the 3- and 5-skill levels spending the vast majority of their time performing technical tasks, while supervisory, managerial, and administrative functions become the more dominant characteristic of the 7-skill level job. Low numbers of tasks performed by over 50 percent of the 3- and 5-skill level group and the number of different jobs they are in suggest a great deal of diversity in this career ladder group. Nine-skill level and CEM Code personnel were clearly managers and supervisors, performing predominantly supervisory, managerial, and administrative tasks.

### ANALYSIS OF 392X0 AFR 39-1 SPECIALTY DESCRIPTIONS

Survey data by skill level were compared to the AFR 39-1 Specialty Descriptions for the Maintenance Scheduling Specialist, Technician, and Superintendent (39230/50, 39270, and 39290/CEM Code, respectively), all dated 30 April 1987. These descriptions are intended to give a broad overview of the duties and tasks performed in each skill level of the specialty. As mentioned previously in the SPECIALTY JOBS section of this report, all references to production control activities (excluding PME functions) have been deleted from this April 1987 revision of the specialty descriptions. Since personnel working in production control activities represented approximately 16 to 20 percent of all 392X0 personnel surveyed between December 1985 and April 1986, career field managers will need to ensure the appropriate steps are taken to effect a smooth transition of these personnel into other facets of the 392X0 career ladder.

The specialty descriptions for the Maintenance Scheduling Technician and Maintenance Scheduling Superintendent accurately reflect the combined supervisory and technical nature of the 7-skill level job and the staff and managerial nature of the 9-skill/CEM Code level job. The 3-/5-skill level description also appears complete and accurately portrays the range and technical nature of the job.



TABLE 24

REPRESENTATIVE TASKS PERFORMED BY DAFSC 39290 AND  
CEM CODE PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 39290/ CEM CODE (N=52)
B26 DRAFT CORRESPONDENCE	98
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	90
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	88
A13 PREPARE OR UPDATE LOCAL OPERATING INSTRUCTIONS	87
C73 PREPARE AIRMAN PERFORMANCE REPORTS (APR)	87
B21 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	87
A7 ESTABLISH WORK PRIORITIES	83
A5 ESTABLISH PERSONNEL PERFORMANCE STANDARDS	81
B19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	75
C60 EVALUATE INSPECTION REPORTS OR PROCEDURES	75
B20 CONDUCT STAFF MEETINGS	75
A10 PLAN OR SCHEDULE WORK ASSIGNMENTS	73
B46 SUPERVISE MAINTENANCE SCHEDULING TECHNICIANS (AFSC 39270)	71
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	71
C63 EVALUATE PERSONNEL ASSIGNMENTS	69
C61 EVALUATE JOB DESCRIPTIONS	69
K371 REVIEW TCTO STATUS REPORTS	63
C51 ANALYZE WORKLOAD REQUIREMENTS	62
L382 CONDUCT OR ATTEND DAILY MAINTENANCE PLANNING MEETINGS	60
K370 REVIEW SCHEDULING EFFECTIVENESS DATA	58
D78 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	58
C72 MAKE STAFF ASSISTANCE VISITS	56
B32 IMPLEMENT LOCAL TRAINING PROGRAMS	56
C58 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	54
C68 EVALUATE SUGGESTIONS	54
C55 EVALUATE COMPLIANCE WITH WORK STANDARDS	52
C56 EVALUATE CONTENTS OF TECHNICAL ORDERS (TO)	52
L385 COORDINATE MAINTENANCE REQUIREMENTS WITH OPERATIONS	50
F152 CONDUCT BRIEFINGS ON PROJECTED AIRCRAFT REQUIREMENTS	48
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	46

TABLE 25

REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSC 39270  
AND DAFSC 39290/CEM CODE PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 39270 (N=434)	DAFSC 39290/ CEM CODE (N=52)	DIFF
L378 ASSIGN INDIVIDUAL JOB CONTROL NUMBERS FOR PLANNED MAINTENANCE	52	13	+39
L418 SCHEDULE REPLACEMENT OF TIME CHANGE ITEMS	44	10	+34
K353 CONDUCT AUTOMATED RECORDS REVIEWS	44	12	+32
N462 UPDATE INSPECTION OR TIME CHANGE REQUIREMENTS USING REMOTE DEVICES	45	13	+32
L414 SCHEDULE ACCOMPLISHMENT OF TCTO	45	15	+31
N454 OPEN OR CLOSE REMOTE DEVICES	65	35	+30
K537 INITIATE TIME CHANGE ACTIONS	36	8	+28
N447 LOAD DISCREPANCIES INTO SYSTEM RECORDS	38	10	+28
L398 INITIATE SCHEDULED INSPECTIONS	45	17	+28
L406 POST SCHEDULING INFORMATION ONTO VISUAL MEDIA, SUCH AS BOARDS OR CHARTS	44	19	+25
-----			
A13 PREPARE OR UPDATE LOCAL OPERATING INSTRUCTIONS	37	87	-50
C60 EVALUATE INSPECTION REPORTS OR PROCEDURES	26	75	-49
C61 EVALUATE JOB DESCRIPTIONS	21	69	-48
A5 ESTABLISH PERSONNEL PERFORMANCE STANDARDS	33	81	-48
B27 DRAFT OR REVISE JOB DESCRIPTIONS	27	71	-44
C68 EVALUATE SUGGESTIONS	10	54	-44
B46 SUPERVISE MAINTENANCE SCHEDULING TECHNICIANS (AFSC 39270)	29	71	-42
C72 MAKE STAFF ASSISTANCE VISITS	17	56	-39
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	54	90	-36
C70 EVALUATE WORK SCHEDULES	36	69	-33

## 392X0 TRAINING ANALYSIS

As explained in Section II, occupational survey data provide one of the many sources of information which can be used to assist in the development of a training program relevant to the needs of personnel in their first enlistment. Specifically, the primary factor used to review training programs is the percent of first-enlistment (1-48 months TAFMS) personnel performing specific tasks. Other considerations in training decisions include the overall description of the job being performed by first-enlistment personnel and their overall distribution across career ladder jobs, the percent of first-job (1-24 months TAFMS) personnel performing specific tasks, training emphasis ratings (previously explained in the SURVEY METHODOLOGY section of this report), subject-matter expert input, and the availability of training equipment or instructors. Normally, task difficulty ratings would also be considered; however, when asked to assess the relative difficulty of tasks in the job inventory, senior level personnel showed so much disagreement that no reliable data for this factor could be reported.

This training analysis reviews the current Specialty Training Standard (STS) and Tentative Plan of Instruction (POI) for the 392X0 career ladder. Technical school personnel from Chanute Technical Training Center matched tasks from the job inventory to corresponding sections of the STS and Tentative POI for Course 3ABR39230 000. Occupational survey data for the matched tasks were then used to assess the appropriateness of the various items in the training documents. A complete computer listing displaying the percent members performing tasks, training emphasis ratings for each task, along with the STS and POI matchings, has been forwarded to the technical school for their use in further detailed reviews of the training documents. A summary of this information is presented below.

### Training Emphasis Data

Training emphasis data provide information on first-term training needs, as perceived by experienced senior career ladder personnel in the field. This information, along with the percent members performing data, can aid training managers in determining if revisions to the STS or POI are required. Because the TE ratings are the composite opinion of experienced career ladder personnel as to which tasks are considered important for first-term airman training, these data can guide training developers in where to place emphasis in entry-level training. Tasks receiving high TE ratings, accompanied by moderate to high percentages of first-enlistment personnel performing tasks, may warrant resident training. Those tasks receiving high TE ratings but low percentages performing may be more appropriately planned for OJT programs within the career ladder. Low TE ratings may highlight tasks best left out of training for first-enlistment personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks. Numerous lists of tasks, accompanied by TE ratings, are contained in the Training Extract package and should be reviewed in detail by technical school personnel. For a more detailed explanation of TE rating, see Task Factor Administration in the SURVEY METHODOLOGY section of this report.

### First-Enlistment Personnel

In this study, there are 521 members in their first enlistment, representing 39 percent of all 392X0 personnel surveyed. The majority are assigned to TAC (40 percent), SAC (20 percent), MAC (16 percent), and USAFE (12 percent), working primarily at the wing and squadron levels. Fifty-one percent report operating a mini- or microcomputer on the job. All are qualified at either the 3- or 5-skill level.

As seen in Figure 4 (which displays the distribution of these personnel across specialty jobs), these first-enlistment members are found in five of the six jobs identified as specific to the 392X0 AFSC (PLANS AND SCHEDULING PERSONNEL, TIME CHANGE MONITORS, TCTO MONITORS, CEMS DOCUMENTATION PERSONNEL, and PRODUCTION CONTROL PERSONNEL), with 20 percent not grouping in any of the jobs identified. Although the majority (44 percent) are found in the PLANS AND SCHEDULING PERSONNEL group, the fact that they are distributed across a variety of jobs and that a sizeable number did not group into any of the identified jobs suggests a great deal of diversity in the jobs performed by these first-enlistment personnel. This diversity is also seen in Table 26, which lists representative tasks performed by these members. Only three tasks were performed by over 50 percent of the group, with only 71 percent performing the most commonly performed task. This suggests very little commonality among jobs held by these incumbents. A similar pattern of diversity is also evident when reviewing the relative percent time spent on various duties oriented toward the 392X0 AFSC (see Table 27, Duties K, L, N, and O). Again, first-enlistment members are spending considerable amounts of time across each duty versus concentrating their time on only a few duties. Since the first-enlistment group is the target for ABR training, this description is highlighted to provide a foundation for examining specialty entry-level training.

### Specialty Training Standard (STS)

A comprehensive review of the August 1986 STS for AFSC 392X0 compared STS elements with occupational survey data. STS elements containing general information common across AF specialties were not reviewed. The remaining elements were reviewed in terms of the percent of either first-job, first enlistment, 5-skill level, or 7-skill level personnel performing the matched tasks. This review found only one STS element (STS 9a) with tasks being performed by less than 20 percent of any skill level group covered by the STS, as shown below:

DISTRIBUTION OF 392X0 FIRST-ENLISTMENT PERSONNEL  
ACROSS SPECIALTY JOB GROUPS  
(PERCENT MEMBERS PERFORMING)

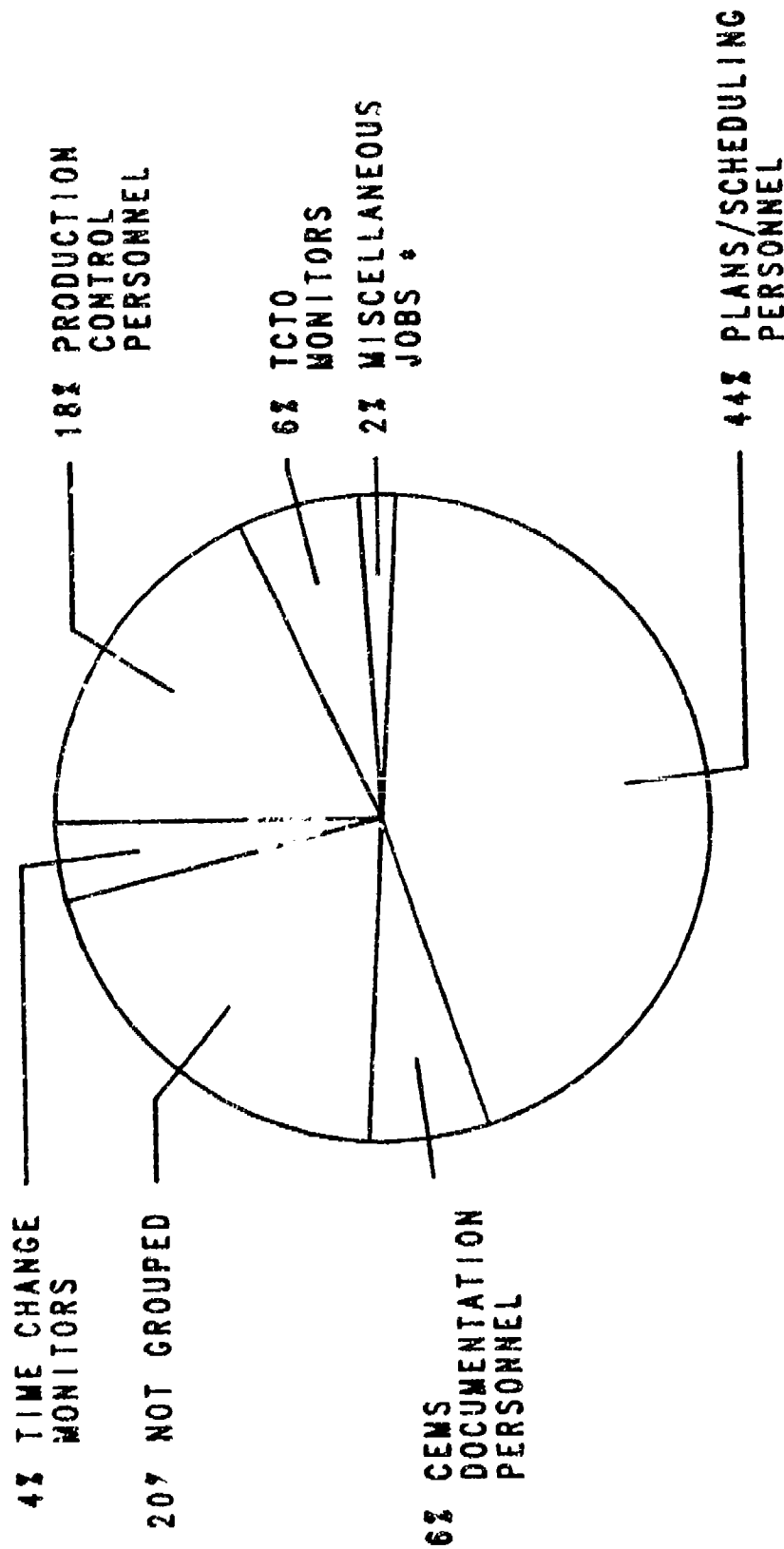


FIGURE 4

\* MISCELLANEOUS JOBS INCLUDE TECHNICAL TRAINING INSTRUCTORS, SUPERVISORS/MANAGERS, AND AEROSPACE VEHICLE MAINTENANCE DATA SYSTEMS ANALYSTS.

TABLE 26

## REPRESENTATIVE TASKS PERFORMED BY 392XO FIRST-ENLISTMENT PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=521)
N454 OPEN OR CLOSE REMOTE DEVICES	71
E139 UPDATE COMPUTER LISTINGS	64
L378 ASSIGN INDIVIDUAL JOB CONTROL NUMBERS FOR PLANNED MAINTENANCE	60
N462 UPDATE INSPECTION OR TIME CHANGE REQUIREMENTS USING REMOTE DEVICES	49
L395 DISTRIBUTE MAINTENANCE PLANS OR SCHEDULES	46
L398 INITIATE SCHEDULED INSPECTIONS	45
K353 CONDUCT AUTOMATED RECORDS REVIEWS	44
N460 UPDATE DISCREPANCY DATA USING REMOTE DEVICES	43
L414 SCHEDULE ACCOMPLISHMENT OF TCTO	43
M447 LOAD DISCREPANCIES INTO SYSTEM RECORDS	42
L382 CONDUCT OR ATTEND DAILY MAINTENANCE PLANNING MEETINGS	42
L375 ADJUST SCHEDULES TO MEET EMERGENCY OR PRIORITY MAINTENANCE REQUIREMENTS	42
K354 CONDUCT MANUAL RECORDS REVIEWS	41
L406 POST SCHEDULING INFORMATION ONTO VISUAL MEDIA, SUCH AS BOARDS OR CHARTS	40
N463 UPDATE TCTO STATUS INFORMATION USING REMOTE DEVICES	40
L407 PREPARE INSPECTION PACKAGES	40
N444 FORECAST INSPECTION OR TIME CHANGE REQUIREMENTS USING REMOTE DEVICES	39
L418 SCHEDULE REPLACEMENT OF TIME CHANGE ITEMS	39
K373 UPDATE TCTO CHANGES OR REPORTS	37
P510 ASSIGN JOB CONTROL NUMBERS TO UNSCHEDULED MAINTENANCE JOBS	37
N448 LOAD INITIAL INSPECTION OR TIME CHANGE REQUIREMENTS INTO SYSTEM RECORDS	37
K357 INITIATE TIME CHANGE ACTIONS	36
L410 PREPLAN DAILY MAINTENANCE	34
L399 MAINTAIN MANUAL DELAYED DISCREPANCY FILES	32
L394 DEVELOP WEEKLY UTILIZATION OR MAINTENANCE SCHEDULES FOR AEROSPACE VEHICLES	32
K356 INITIATE OR MAINTAIN MASTER ID LISTINGS	31
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	30
K372 SET UP AIRCRAFT RECORD JACKETS	30
L411 PROJECT MAINTENANCE REQUIREMENTS	30
L415 SCHEDULE AEROSPACE VEHICLE INSPECTIONS	29
M426 COMPUTE HOURS TO NEXT PHASE	29
N461 UPDATE EQUIPMENT OPERATING TIMES USING REMOTE DEVICES	28
L390 DEVELOP MONTHLY UTILIZATION OR MAINTENANCE SCHEDULES FOR AEROSPACE VEHICLES	28

TABLE 27

RELATIVE PERCENT TIME SPENT PERFORMING  
DUTIES BY 392X0 FIRST-ENLISTMENT PERSONNEL

<u>DUTIES</u>	<u>FIRST ENLISTMENT PERSONNEL (N=521)</u>
A. ORGANIZING AND PLANNING	3
B. DIRECTING AND IMPLEMENTING	3
C. INSPECTING AND EVALUATING	2
D. TRAINING	*
E. PREPARING, UPDATING, AND FILING FORMS, RECORDS, AND REPORTS	5
F. PERFORMING AEROSPACE VEHICLE DATA FUNCTIONS	4
G. PERFORMING COMMUNICATIONS ELECTRONIC METEOROLOGICAL (CEM) FUNCTIONS	*
H. PERFORMING GENERAL CALCULATIONS AND ANALYSIS FUNCTIONS	*
I. PERFORMING FILES MAINTENANCE FUNCTIONS	*
J. PERFORMING SYSTEMS ANALYSIS AND DESIGN FUNCTIONS	*
K. MAINTAINING MAINTENANCE DOCUMENTATION AND RECORDS	18
L. PLANNING AND SCHEDULING MAINTENANCE	28
M. COMPUTING AND DETERMINING INFORMATION	1
N. MANAGING AND UPDATING AUTOMATED MAINTENANCE RECORDS	17
O. PROCESSING SHOP WORK	15
P. CONTROLLING MAINTENANCE	3
Q. PERFORMING MOBILITY SUPPORT FUNCTIONS	*

\* Less than 1 percent

	<u>1ST</u> <u>JOB</u>	<u>1ST</u> <u>ENL</u>	<u>DAFSC</u> <u>39250</u>	<u>DAFSC</u> <u>39270</u>	<u>TNG</u> <u>EMP*</u>
----- 9a. Determine capabilities to support operational requirements related to operational planning cycle -----					
M430 Compute or determine aircraft or missile equipment capabilities	3	5	6	13	2.80

\* Mean TE Rating is 1.59 and Standard Deviation is 1.75.

Training personnel and subject-matter experts should review this element to determine if criticality, safety, or some other consideration requires that it remain in the STS.

Additionally, six nonsupervisory tasks specific to the 392X0 AFSC were not matched to the STS and were performed by at least 20 percent of the personnel in either the first-job, first-enlistment, 5-skill level, or 7-skill level groups. These tasks, together with percent members performing data and TE ratings, include:

	<u>1ST</u> <u>JOB</u>	<u>1ST</u> <u>ENL</u>	<u>DAFSC</u> <u>39250</u>	<u>DAFSC</u> <u>39270</u>	<u>TNG</u> <u>EMP*</u>
L407 Prepare inspection packages	32	40	39	38	6.05
L376 Adjust schedules to meet emergency or priority optional or flying requirements	23	31	31	43	5.34
L400 Maintain scheduled maintenance reports	19	23	24	29	5.09
L397 Gather operational data, such as flying hours, from other agencies	15	18	17	24	4.11
L377 Assign blocks of job control numbers to functional users	17	18	21	29	4.07
N445 Input or update current condition status of assigned equipment using remote devices	19	20	22	22	3.55

\* Mean TE Rating is 1.59 and Standard Deviation is 1.75.

Generally, such tasks not referenced should be covered by some existing element or a new element could be added to the STS.



### Plan of Instruction (POI)

Based on assistance from technical school subject-matter experts in matching the job inventory tasks to the Tentative 3ABR39230 000 POI, dated 6 January 1987, occupational survey data were matched to related training objectives. The specific data examined included percent members performing data for first-job and first-enlistment personnel, together with TE data for the matched tasks.

Of the 50 POI objectives that were matched with survey data, 12 were not supported, as fewer than 30 percent of first-enlistment personnel indicated performing the matched tasks. This equates to 54.5 hours of course time. Examples of these objectives, along with percent members performing and TE data are displayed in Table 28, while a complete listing is reflected in the 392X0 Training Extract. In general, areas not supported due to low percentages of personnel performing included: Quarterly Planning (fleet time and capabilities), Monthly Planning, and Weekly Planning (operational events subsystem).

In accordance with ATCR 52-22, and in the interest of cost-effectiveness, objectives where the probability of first-enlistment performance is less than 30 percent should not be taught in a resident training course without further justification. Although it is apparent that, due to the diversity of the career ladder (especially among personnel in their first enlistment), a completely cost-effective training course may not be possible, it is obvious that some type of technical training is necessary. Therefore, it is suggested that training management personnel consider another set of performance data in evaluating the Tentative 3ABR39230 000 POI. Specifically, the percent performing data for those first-enlistment personnel in the major 392X0 job groups identified in the SPECIALTY JOBS section of this report (PLANS AND SCHEDULING PERSONNEL, TIME CHANGE MONITORS, TCTO MONITORS, and CEMS DOCUMENTATION PERSONNEL) may lend support for retaining otherwise unsubstantiated objectives in the POI. Examples of these data matched to the unsupported POI objectives are found in Table 29. Using this approach, only 3 (versus 12) objectives fail to be supported by the survey data. These objectives include:

- IV1B. WITHOUT THE USE OF REFERENCE MATERIALS, IDENTIFY SELECTED FACTS OF FLEET TIME (4 Hours)
- IV1C. GIVEN PERTINENT INFORMATION, PROJECT FLEET TIME (2 Hours)
- IV1E. GIVEN A CALCULATOR AND FIVE MAINTENANCE CAPABILITY FORMULAS, COMPUTE AT LEAST FOUR OUT OF FIVE CAPABILITY PROBLEMS CORRECTLY (8 Hours)

These objectives, along with any others which are weakly supported by survey data, should be given serious consideration for deletion by training management personnel. Interestingly, the majority of tasks that were matched to the unsupported POI objectives carried high TE ratings, suggesting that

TABLE 28

EXAMPLES OF POI OBJECTIVES REFLECTING LOW 392X0 FIRST-ENLISTMENT  
TASK PERFORMANCE  
(LESS THAN 30 PERCENT RESPONDING)

POI OBJECTIVE (WITH SELECTED SAMPLE TASKS)	TNG EMP*	1ST JOB (N=259)	1ST ENL (N=521)
IV1C. GIVEN PERTINENT INFORMATION, PROJECT FLEET TIME HOURS			
M425 COMPUTE FLEET TIME HOURS	4.20	8	10
IV1E. GIVEN A CALCULATOR AND FIVE MAINTENANCE CAPABILITY FORMULAS, COMPUTE AT LEAST FOUR OUT OF FIVE CAPABILITY PROBLEMS CORRECTLY			
M430 COMPUTE OR DETERMINE AIRCRAFT OR MISSILE EQUIPMENT CAPABILITIES			
IV2D. WITHOUT REFERENCE MATERIALS, IDENTIFY SELECTED FACTS ABOUT MAINTENANCE SCHEDULING EFFECTIVENESS	2.80	3	5
K351 COLLECT AIRCRAFT OR MISSILE SCHEDULING EFFECTIVENESS DATA K370 REVIEW SCHEDULING EFFECTIVENESS DATA	4.21 4.07	21 19	25 26
IV2F. GIVEN A PREVIOUSLY PREPARED AF FORM 2401 AND PERTINENT INFORMATION, DEVELOP A MONTHLY UTILIZATION/MAINTENANCE PLAN			
L390 DEVELOP MONTHLY UTILIZATION OR MAINTENANCE SCHEDULES FOR AEROSPACE VEHICLES	5.71	21	28

\* Mean TE Rating is 1.59 and Standard Deviation is 1.75

TABLE 28 (CONTINUED)

EXAMPLES OF POI OBJECTIVES REFLECTING LOW 392X0 FIRST-ENLISTMENT  
TASK PERFORMANCE  
(LESS THAN 30 PERCENT RESPONDING)

POI OBJECTIVE (WITH SELECTED SAMPLE TASKS)	TNG EMP*	1ST JOB (N=259)	1ST ENL (N=521)
V1D. GIVEN APPLICABLE REFERENCE MATERIALS AND PERTINENT INFORMATION, FORMAT INPUTS TO MAINTAIN THE OPERATIONAL EVENT SUBSYSTEM OF MMHICS			
N461 UPDATE EQUIPMENT OPERATING TIMES USING REMOTE DEVICES	4.98	29	28
N459 UPDATE CURRENT STATUS OF OPERATIONAL EVENTS USING REMOTE DEVICES	4.07	14	14

\* Mean TE Rating is 1.59 and Standard Deviation is 1.75

TABLE 29

EXAMPLES OF 392X0 PO1 OBJECTIVES MATCHED WITH SPECIALTY JOB GROUP DATA  
(PERCENT FIRST-ENLISTMENT PERSONNEL PERFORMING)

PO1 OBJECTIVE	SELECTED MATCHED TASKS	TNG EMP*	PLANS AND SCHEDULING PERSONNEL	TIME CHANGE MONITORS	TCTO MONITORS	CFMS DOC PERSONNEL
IV1C.	M425 COMPUTE FLEET TIME HOURS	4.20	20	0	0	6
IV1E.	M430 COMPUTE OR DETERMINE AIRCRAFT OR OR MISSILE EQUIPMENT CAPABILITIES	2.80	11	0	0	0
IV2D.	K351 COLLECT AIRCRAFT OR MISSILE SCHEDULING EFFECTIVENESS DATA K370 REVIEW SCHEDULING EFFECTIVENESS DATA	4.21 4.07	47 48	4 0	12 15	19 19
IV2F.	L390 DEVELOP MONTHLY UTILIZATION OR MAINTENANCE SCHEDULES FOR AEROSPACE VEHICLES	5.71	58	4	0	3
VID.	N461 UPDATE EQUIPMENT OPERATING TIMES USING REMOTE DEVICES N459 UPDATE CURRENT STATUS OF OPERATIONAL EVENTS USING REMOTE DEVICES	4.98 4.07	35 21	50 8	21 15	69 28

\* Mean TE Rating is 1.59 and Standard Deviation is 1.75

senior NCOs in the career ladder feel some type of training in these areas is appropriate. Given the low percentages of first-job and first-enlistment personnel performing the matched tasks, however, this training might best be removed from the resident course and made a part of a formal OJT program.

Five nonsupervisory tasks which were performed by over 30 percent of either first-job or first-enlistment personnel were not matched to the POI. These tasks, along with the percent members performing and TE data, include:

	<u>1ST JOB</u>	<u>1ST ENL</u>	<u>TNG EMP*</u>
L407 Prepare inspection packages	32	40	6.05
L375 Adjust schedules to meet emergency or priority maintenance requirements	33	42	5.50
L376 Adjust schedules to meet emergency or priority optional or flying requirements	23	31	5.34
K358 Maintain manual records of recurring inspection times or dates	32	34	4.75
B 23 Direct development or maintenance of status boards, graphs, or charts	26	30	3.89

\* Mean TE Rating is 1.59 and Standard Deviation is 1.75.

Training personnel should review these tasks to determine the necessity for training and the most effective method to accomplish it.

#### AFSC 392X0 MAJCOM AND CONUS-OVERSEAS GROUP COMPARISONS

Tasks performed and background data for personnel of the major commands (MAJCOM) with the largest 392X0 populations were compared to determine whether job content varied as a function of MAJCOM assignment. Table 30 displays the relative percent time spent by 392X0 personnel across these MAJCOMs by duties.

Generally, the largest percentage of duty time and 392X0 resources in each MAJCOM are committed to the performance of tasks pertaining to the planning and scheduling of maintenance, together with various documentation functions (Duties K, L, and N). There is, however, a marked difference between commands in terms of involvement in production control activities (Duty O). While SAC, MAC, ATC, and AFSC personnel devote a fairly large amount of time to production control functions, TAC, USAFE, and PACAF personnel do not. This division represents one difference between commands operating under a centralized (SAC, MAC, ATC, and AFSC) versus decentralized (TAC, USAFE, and PACAF) maintenance concept (NOTE: SAC was still operating under the

TABLE 30

RELATIVE PERCENT TIME SPENT ON DUTIES BY 392X0 MAJOR COMMAND GROUPS  
(PERCENT MEMBERS)

DUTIES	TAC (N=434)	SAC (N=279)	MAC (N=218)	USAF (N=182)	ATC (N=81)	PACAF (N=53)	AFSC (N=50)
A. ORGANIZING AND PLANNING	4	5	5	5	5	6	9
B. DIRECTING AND IMPLEMENTING	7	9	9	10	11	11	13
C. INSPECTING AND EVALUATING	4	4	4	5	6	5	8
D. TRAINING	3	3	4	4	13	2	3
E. PREPARING, UPDATING, AND FILING FORMS, RECORDS, AND REPORTS	5	4	4	5	4	4	5
F. PERFORMING AEROSPACE VEHICLE DATA FUNCTIONS	4	3	4	5	3	3	4
G. PERFORMING COMMUNICATIONS ELECTRONIC METEOROLOGICAL (CEM) FUNCTIONS	*	*	*	*	*	*	*
H. PERFORMING GENERAL CALCULATIONS AND ANALYSIS FUNCTIONS	*	*	*	*	*	*	*
I. PERFORMING FILES MAINTENANCE FUNCTIONS	*	*	*	*	*	*	*
J. PERFORMING SYSTEMS ANALYSIS AND DESIGN FUNCTIONS	*	*	*	*	*	*	*
K. MAINTAINING MAINTENANCE DOCUMENTATION AND RECORDS	19	12	11	16	8	14	7
L. PLANNING AND SCHEDULING MAINTENANCE	27	26	24	22	15	27	16
M. COMPUTING AND DETERMINING INFORMATION	1	2	*	1	1	2	1
N. MANAGING AND UPDATING AUTOMATED MAINTENANCE RECORDS	17	12	10	12	7	12	6
O. PROCESSING SHOP WORK	5	16	21	11	23	10	20
P. CONTROLLING MAINTENANCE	1	2	3	2	2	3	5
Q. PERFORMING MOBILITY SUPPORT FUNCTIONS	*	*	*	*	*	*	*

\* Less than 1 percent

centralized maintenance concept at the time this survey was in the field). As noted previously in the SPECIALTY JOBS section of this report, however, all references to production control activities (excluding PME responsibilities) have been deleted from the AFR 39-1 Specialty Descriptions for the 392X0 career ladder, effective 30 April 1987. As such, the differences currently noted between MAJCOM groups with regard to production control activities should disappear over time.

A similar comparison of 392X0 5-skill level CONUS and overseas groups revealed little difference in the jobs performed by these groups.

## SECTION IV

### JOB SATISFACTION ANALYSIS

An examination of the job satisfaction indicators of various experience groups can give career ladder managers a better understanding of some of the factors which may affect the job performance of airmen in the career ladder. Five attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions were included in the survey booklet to provide indications of job satisfaction. Table 31 presents job satisfaction data for the specialty jobs discussed in the SPECIALTY JOBS section of this report. An examination of these data can show how overall job satisfaction may be influenced by the type of jobs performed. Another view of job satisfaction data is reflected in Tables 32 and 33, where data for AFSC 391X0 and AFSC 392X0 TAFMS groups (respectively) are displayed, together with data from a comparative sample of Direct Support career ladders surveyed in 1986. These data can give a relative measure of how the job satisfaction of AFSC 391X0 and 392X0 personnel compares with that of other similar AF specialties. Finally, an indication of how job satisfaction perceptions within the 391X0 and 392X0 career ladders have changed over time is provided in Table 34 (391X0) and Table 35 (392X0). In Table 34, AFSC 391X0 TAFMS group data for the 1987 survey respondents is presented with data from respondents to the last occupational survey of the career ladder, published in October 1979. These previous survey data reflect responses from former A-shred (AEROSPACE VEHICLE) and B-shred (COMMUNICATIONS-ELECTRONICS) personnel, while the current survey data reflect the fact that these shredouts were deleted in the October 1982 restructuring of the 39XXX career field. Table 35 presents 392X0 job satisfaction data for current and previous survey time-in-career-field (TICF) groups, as the 392X0 career ladder was entered laterally at the time of the October 1978 occupational survey.

Overall, the job satisfaction indicators for specialty job group members in the 39XXX career field were generally very good, with at least 50 percent of the personnel in most all specialty job groups identified responding positively to the indicators listed. Notable exceptions among the 391X0 job groups identified included C-E STAFF ANALYSTS and OPERATIONAL TEST AND

TABLE 31

**JOB SATISFACTION INDICATORS BY CAREER LADDER STRUCTURE GROUPS**  
(PERCENT MEMBERS RESPONDING)\*

	AEROSPACE VEHICLE MAINTENANCE DATA SYS ANALYSTS (N=210)	DATA BASE MANAGERS (N=161)	MMICS/CAMS FUNCTIONAL SYS MGRS (N=16)	SPECIAL STUDIES ANALYSTS (N=6)	HQ AFOTEC/ USAF TAWC PERSONNEL (N=5)	OPERATIONAL TEST AND EVAL TEAM ANALYSTS (N=10)	C-E STAFF ANALYSTS (N=17)
<u>EXPRESSED JOB INTEREST:</u>							
INTERESTING	68	84	94	100	100	90	53
SO-SO	19	7	6	0	0	10	18
DULL	13	9	0	0	0	0	29
<u>PERCEIVED USE OF TALENTS:</u>							
FAIRLY WELL TO PERFECTLY	78	83	88	83	100	80	53
LITTLE OR NOT AT ALL	22	17	12	17	0	20	47
<u>PERCEIVED USE OF TRAINING:</u>							
FAIRLY WELL TO PERFECTLY	66	71	63	83	80	40	53
LITTLE OR NOT AT ALL	34	29	37	17	20	60	47
<u>SENSE OF ACCOMPLISHMENT FROM JOB:</u>							
SATISFIED	64	72	89	83	100	90	53
NEUTRAL	12	8	0	0	0	10	18
DISSATISFIED	24	19	12	17	0	0	29
<u>REENLISTMENT INTENTIONS:</u>							
WILL RETIRE	4	9	38	0	40	20	12
WILL/PROBABLY WILL REENLIST	68	64	50	83	40	70	77
WILL NOT/PROBABLY WILL NOT REENLIST	28	27	12	17	20	10	11

\* Columns may not add to 100 percent due to nonresponse or rounding



TABLE 31 (CONTINUED)

JOB SATISFACTION INDICATORS BY CAREER LADDER STRUCTURE GROUPS  
(PERCENT MEMBERS RESPONDING)\*

	PLANS AND SCHEDULING PERSONNEL (N=560)	TIME CHANGE MONITORS (N=36)	TCTO MONITORS (N=62)	CEMS DOC PERSONNEL (N=85)	PRODUCTION CONTROL PERSONNEL (N=218)	MAJCOM AEROSPACE VEHICLE DISTR OFFICERS (N=5)	TECHNICAL TRAINING INSTR (N=23)	SUPERVISORS/ MANAGERS (N=333)
<u>EXPRESSED JOB INTEREST:</u>								
INTERESTING	73	75	74	79	65	100	87	81
SO-SO	18	19	19	13	20	0	9	11
DULL	9	3	5	8	14	0	4	9
<u>PERCEIVED USE OF TALENTS:</u>								
FAIRLY WELL TO PERFECTLY	85	86	79	85	68	100	91	85
LITTLE OR NOT AT ALL	15	11	19	15	31	0	9	14
<u>PERCEIVED USE OF TRAINING:</u>								
FAIRLY WELL TO PERFECTLY	83	81	77	84	59	60	87	79
LITTLE OR NOT AT ALL	17	19	21	16	41	40	13	21
<u>SENSE OF ACCOMPLISHMENT FROM JOB:</u>								
SATISFIED	71	83	76	73	62	100	83	69
NEUTRAL	7	3	10	11	13	0	4	8
DISSATISFIED	22	11	11	16	24	0	13	23
<u>REENLISTMENT INTENTIONS:</u>								
WILL RETIRE	10	6	5	5	15	20	13	26
WILL/PROBABLY WILL REENLIST	64	69	71	68	61	80	23	61
WILL NOT/PROBABLY WILL NOT REENLIST	25	25	24	27	24	0	4	12

\* Columns may not add to 100 percent due to nonresponse or rounding

TABLE 32

COMPARISON OF JOB SATISFACTION INDICATORS BY 391X0 AND COMPARATIVE  
SAMPLE GROUPS  
(PERCENT MEMBERS RESPONDING)\*

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	391X0 (N=165)	COMP SAMPLE** (N=977)	391X0 (N=211)	COMP SAMPLE** (N=413)	391X0 (N=405)	COMP SAMPLE** (N=750)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	70	57	70	58	78	69
SO-SO	15	22	18	22	11	17
DULL	15	20	11	20	11	13
<u>PERCEIVED USE OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY	80	62	73	66	81	75
LITTLE OR NOT AT ALL	20	36	27	33	19	24
<u>PERCEIVED USE OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	69	79	63	68	69	70
LITTLE OR NOT AT ALL	31	20	37	32	30	29
<u>SENSE OF ACCOMPLISHMENT FROM JOB:</u>						
SATISFIED	69	60	64	58	65	64
NEUTRAL	12	15	8	12	10	10
DISSATISFIED	19	24	28	30	25	25
<u>REENLISTMENT INTENTIONS:</u>						
WILL RETIRE	-	-	1	1	23	17
WILL/PROBABLY WILL REENLIST	62	64	68	72	65	74
WILL NO./PROBABLY WILL NOT REENLIST	37	34	30	26	12	8

\* Columns may not add to 100 percent due to nonresponse or rounding

\*\* Comparative sample of Direct Support career ladders surveyed in 1986 (Includes AFSCs 552X2 and 611X0)

- Less than 1 percent

TABLE 33

COMPARISON OF JOB SATISFACTION INDICATORS BY 392X0 AND COMPARATIVE  
SAMPLE GROUPS  
(PERCENT MEMBERS RESPONDING)\*

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	392X0 (N=521)	COMP SAMPLE** (N=977)	392X0 (N=158)	COMP SAMPLE** (N=413)	392X0 (N=648)	COMP SAMPLE** (N=750)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	70	57	70	58	72	69
SO-SO	20	22	18	22	16	17
DULL	10	20	10	20	11	13
<u>PERCEIVED USE OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY	79	62	82	66	79	75
LITTLE OR NOT AT ALL	20	36	17	33	20	24
<u>PERCEIVED USE OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	74	79	79	68	76	70
LITTLE OR NOT AT ALL	26	20	21	32	24	29
<u>SENSE OF ACCOMPLISHMENT FROM JOB:</u>						
SATISFIED	71	60	68	58	67	64
NEUTRAL	9	15	10	12	9	10
DISSATISFIED	19	24	20	30	24	25
<u>REENLISTMENT INTENTIONS:</u>						
WILL RETIRE	-	-	-	1	26	17
WILL/PROBABLY WILL REENLIST	58	64	71	72	64	74
WILL NOT/PROBABLY WILL NOT REENLIST	41	34	27	26	10	8

\* Columns may not add to 100 percent due to nonresponse or rounding

\*\* Comparative sample of Direct Support Career ladders surveyed in 1986 (includes AFSCs 552X2 and 611X0)

- Less than 1 percent

TABLE 34

COMPARISON OF 391X0 JOB SATISFACTION INDICATORS FOR CURRENT AND PREVIOUS SURVEY TAFMS GROUPS  
(PERCENT MEMBERS RESPONDING)\*

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1987	1979	1987	1979	1987	1979
	(N=165)	391X0A (N=68) 391X0B (N=18)	(N=211) 391X0A (N=150) 391X0B (N=31)	391X0A (N=150) 391X0B (N=31)	(N=405) 391X0A (N=224) 391X0B (N=63)	391X0A (N=224) 391X0B (N=63)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	79	49	70	51	78	59
SO-SO	15	24	18	21	11	17
DULL	15	27	11	21	11	22
		39		16		21
<u>PERCEIVED USE OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY	80	63	73	59	81	69
LITTLE OR NOT AT ALL	20	37	27	39	19	29
		61		52		71
<u>PERCEIVED USE OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	69	57	63	43	69	54
LITTLE OR NOT AT ALL	31	43	37	53	30	44
		78		58		59
<u>SENSE OF ACCOMPLISHMENT FROM JOB:</u>						
SATISFIED	69	52	64	42	65	48
NEUTRAL	12	22	8	17	10	14
DISSATISFIED	19	27	28	39	25	37
		61		42		30
<u>REENLISTMENT INTENTIONS:</u>						
WILL RETIRE	-	**	1	**	23	**
WILL/PROBABLY WILL REENLIST	62	34	68	55	65	70
WILL NOT/PROBABLY WILL NOT REENLIST	37	63	30	39	12	29
		72		52		34

\* Columns may not add to 100 percent due to nonresponse or rounding

\*\* Data not collected in 1979

- less than 1 percent

TABLE 35

COMPARISON OF 392X0 JOB SATISFACTION INDICATORS FOR CURRENT AND PREVIOUS SURVEY T1CF GROUPS  
(PERCENT MEMBERS RESPONDING)\*

	1-48 MOS T1CF		49-96 MOS T1CF		97+ MOS T1CF	
	1987 (N=715)	1978 (N=918)	1987 (N=248)	1978 (N=372)	1987 (N=363)	1978 (N=***)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	70	70	70	70	73	**
SO-SO	19	14	20	12	15	**
DULL	11	11	10	11	11	**
<u>PERCEIVED USE OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY	80	78	81	78	79	**
LITTLE OR NOT AT ALL	20	20	19	20	20	**
<u>PERCEIVED USE OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	73	75	76	71	76	**
LITTLE OR NOT AT ALL	26	23	24	26	22	**
<u>SENSE OF ACCOMPLISHMENT FROM JOB:</u>						
SATISFIED	70	64	67	64	67	**
NEUTRAL	9	11	11	10	9	**
DISSATISFIED	21	21	22	21	24	**
<u>REENLISTMENT INTENTIONS:</u>						
WILL RETIRE	1	**	14	**	36	**
WILL/PROBABLY WILL REENLIST	63	73	75	72	54	**
WILL NOT/PROBABLY WILL NOT REENLIST	36	23	10	24	10	**

\* Columns may not add to 100 percent due to nonresponse or rounding

\*\* Data not collected in 1978

EVALUATION TEAM ANALYSTS, while responses from PRODUCTION CONTROL PERSONNEL (a 392X0 job group) were markedly different than those responses from other 392X0 job groups identified. Specifically, responses from the C-E STAFF ANALYSTS were much lower in terms of expressed job interest, perceived use of talents and training, and sense of accomplishment gained from the job, while OPERATIONAL TEST AND EVALUATION TEAM ANALYSTS responded in lower numbers to perceived use of training than personnel in any of the 39XXX career field job groups identified. Additionally, PRODUCTION CONTROL PERSONNEL consistently responded in lower numbers to all job satisfaction indicators when compared to personnel in the remaining 392X0 job groups. Finally, responses from TECHNICAL TRAINING INSTRUCTORS and SUPERVISORS/MANAGERS (groups reflecting a mixture of 391X0 and 392X0 personnel) were basically equivalent to responses from the AFSC-specific jobs identified.

A comparison of 391X0 TAFMS group data to a comparative sample of Direct Support career ladders surveyed in 1986 revealed that, while positive responses for most job satisfaction indicators were equal to or higher than the comparative sample, positive responses for perceived use of training were somewhat lower for all TAFMS groups identified (see Table 32). Also, 391X0 personnel in all TAFMS groups expressed a slightly lower intention to reenlist. A similar comparison of 392X0 TAFMS group data (Table 33) indicates that positive responses for the majority of job satisfaction indicators were again equal to or higher than the comparative sample, the exceptions being limited to a slightly lower perception in the use of training by first-enlistment (1-48 MOS TAFMS) personnel and a lower expressed intention to reenlist for all TAFMS group members.

The positive trend for job satisfaction indicators continues in Table 34, where positive responses for 391X0 TAFMS group data for 1987 survey respondents are substantially higher in all categories than responses from the 1979 survey respondents. Since the 1987 data were collected after the October 1982 restructuring of the 39XXX career field, the increase in these numbers tends to indicate that, from a job satisfaction standpoint, 391X0 career ladder members appear to have benefitted from the restructuring effort. As stated previously, the 392X0 career ladder was entered laterally at the time of the 1978 survey; thus, all data were displayed in terms of TICF groups. With this in mind, Table 35 reveals that positive responses to job satisfaction indicators for 392X0 personnel in the 1987 survey generally are equal to or higher than responses from the 1978 survey respondents, with exceptions being limited to a slightly lower perceived use of training and expressed intention to reenlist for the 1-48 MOS TICF group. These lower numbers probably are due to the fact that 73 percent of the 1987 1-48 MOS TICF group members are in their first enlistment, as opposed to only 6 percent of the 1978 1-48 MOS TICF group members.

## IMPLICATIONS

The purpose of this survey was twofold: (1) to gather data for use in evaluating the current training programs for the 391X0 and 392X0 career ladders in light of the October 1982 restructuring of the 39XXX career field, and (2) to assess the utilization of former AFSC W-392X0 personnel.

In terms of training, the STS and Tentative POI for both career ladders require a thorough review. Several elements of the 391X0 STS were not supported by survey data, primarily in areas dealing with statistical methods of data analysis and organizational capabilities. Correspondingly, several POI objectives were not supported by survey data, and several tasks were not referenced to either document that require review. While the 392X0 STS was generally well supported by survey data, several POI objectives were not. Due to the diversity found in the jobs performed by first-enlistment personnel in both career ladders, an alternative approach for reviewing the POIs was suggested.

An analysis of the current utilization of former AFSC W-392X0 files maintenance (data base management) personnel revealed that, while the majority of these members have transitioned into the 391X0 career ladder, a substantial number are still working in jobs specific to the 392X0 career ladder and are reporting a 392X0 DAFSC. As such, career field managers should closely review the current utilization of these personnel.

Overall, survey data clearly support the current classification structure. No overlap was found in the technical jobs performed by 391X0 and 392X0 personnel; only supervisory/managerial and training responsibilities were found to be common.

APPENDIX A

SELECTED REPRESENTATIVE TASKS  
PERFORMED BY  
CAREER LADDER STRUCTURE GROUPS



TABLE I

GROUP ID NUMBER AND TITLE: GRP083 - AEROSPACE VEHICLE MAINTENANCE DATA  
SYSTEMS ANALYSTS CLUSTER

GROUP SIZE: 210

PERCENT OF SAMPLE: 10%

AVERAGE GRADE: E-4

AVERAGE TICF: 52 MONTHS

AVERAGE TAFMS: 84 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
F147 COMPILE DATA FOR AIRCRAFT SUMMARIES	76
K363 PREPARE MAINTENANCE SUMMARIES	62
F146 COMPILE AIRCRAFT SCHEDULING EFFECTIVENESS DATA	62
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	61
F168 PREPARE AIRCRAFT STUDIES OR BRIEFINGS	61
F165 EVALUATE MAINTENANCE DATA COLLECTION (MDC) DATA	61
F182 REVIEW FULL MISSION CAPABLE RATES (FMCR) FOR DEVELOPING TRENDS OR PROBLEMS	59
F172 PREPARE WRITTEN NARRATIVES ON AIRCRAFT MAINTENANCE SUMMARIES	58
N454 OPEN OR CLOSE REMOTE DEVICES	51
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	47
K370 REVIEW SCHEDULING EFFECTIVENESS DATA	45
K368 REVIEW OR SPOT CHECK MAINTENANCE DATA COLLECTION (MDC) SOURCE DOCUMENTS FOR ACCURACY	40
F162 EVALUATE AEROSPACE VEHICLE EQUIPMENT STATUS DATA	38
E118 PREPARE AIRCRAFT MISSION ANALYSIS REPORTS	36
F187 REVIEW NOT MISSION CAPABLE MISSILE (NMCM) DELAYS OR DURATIONS FOR CORRECTIVE ACTIONS	35
L227 GATHER OPERATIONAL DATA, SUCH AS FLYING HOURS, FROM OTHER AGENCIES	34
M421 ASSEMBLE DATA OR RECORDS FOR COMPUTATION OF STATISTICS, SUCH AS MEAN TIME BETWEEN FAILURE (MTBF)	33
E126 PREPARE DISCREPANCIES PER SORTIE REPORTS	32
B19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	31
F116 PREPARE AF FORMS 2422 (MAINTENANCE ANALYSIS REFERRAL)	31
F150 CONDUCT BRIEFINGS ON AIRCRAFT MAINTENANCE PERFORMANCE	29
F163 EVALUATE AEROSPACE VEHICLE EQUIPMENT UTILIZATION DATA	26

TABLE II

GROUP ID NUMBER AND TITLE: GRP171 - DATA BASE MANAGERS CLUSTER  
 GROUP SIZE: 161 PERCENT OF SAMPLE: 8%  
 AVERAGE GRADE: E-5 AVERAGE TICF: 60 MONTHS  
 AVERAGE TAFMS: 119 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
I326 NOTIFY SYSTEM USERS OF STATUS OF UNSCHEDULED DOWNTIME FOR SYSTEMS, SUCH AS MMICS	96
I309 COORDINATE SYSTEM HARDWARE PROBLEMS OR REPAIR WITH DPI OR USERS	93
I324 MAINTAIN SYSTEMS ADVISORY NOTICE (SAN) FILES	86
I321 INSTRUCT SYSTEM OPERATORS ON SYSTEM CHANGES OR PROBLEMS, SUCH AS EXTENDED DOWNTIME PROCEDURES	84
I311 CORRECT INTERNAL FILE ERRORS	80
I334 VERIFY COMPUTER INPUTS FROM USERS	78
I307 COORDINATE OPERATION OR SCHEDULING OF REMOTE LINE PRINTERS WITH USERS	73
I318 INITIATE PERIODIC OFF-BASE REPORTS, SUCH AS AUTOMATED REPORTS TO COMMAND OR HEADQUARTERS	72
I316 INITIATE DELETE HISTORY (DLH) PROCEDURES	71
I328 PERFORM OPERATOR MAINTENANCE ON SYSTEM HARDWARE, SUCH AS REMOTES OR PRINTERS	68
I320 INITIATE, PREPARE, OR REVIEW DIFFICULTY REPORTS (DIREP)	68
I331 PROCESS TRANSACTIONS TO OBTAIN PRINTS OF SUBSYSTEM RECORDS	66
I305 CONSTRUCT AIR FORCE ONLINE DATA SYSTEM (AFOLDS) INQUIRIES	62
I323 MAINTAIN REJECT NARRATIVE RECORDS	61
I303 BUILD OR UPDATE FILES MAINTENANCE CONTROL RECORDS, SUCH AS UVR, MIK, OR FPD	60
I314 EVALUATE REQUIREMENTS FOR NEW PRODUCTS OR MODIFICATIONS TO EXISTING PRODUCTS, SUCH AS AFOLDS PROGRAMS	58
I329 PREPARE OR MAINTAIN EXECUTION CARDS FOR SPECIALIZED PROGRAMS, SUCH AS FILE UPDATE (FUD) OR "PSEUDO" PROGRAMS	57
I319 INITIATE, PREPARE, OR REVIEW DATA AUTOMATION REQUESTS (DAR)	57
I299 ANALYZE BEGINNING-OF-DAY (BOD) FILE DENSITY REPORTS	43
I301 ANALYZE SYSTEM REJECT REPORTS (TRANSACTION IDENTIFIER CODE: RJP) TO IDENTIFY AREAS REQUIRING TRAINING	41

TABLE III

GROUP ID NUMBER AND TITLE: GRP380 - MMICS/CAMS FUNCTIONAL SYSTEMS  
 MANAGERS CLUSTER  
 GROUP SIZE: 16 PERCENT OF SAMPLE: LESS THAN 1%  
 GRADE: E-7 AVERAGE TICF: 104 MONTHS  
 AVERAGE TAFMS: 230 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
J338 COORDINATE SYSTEM DEVELOPMENT WITH COMPUTER PROGRAMMERS, FUNCTIONAL MANAGERS, OR OTHER ANALYSTS	94
J335 ANALYZE PROPOSALS OR SUGGESTIONS FOR SYSTEM MODIFICATIONS	94
J345 EDIT OR TEST PROGRAMS IN SYSTEMS OTHER THAN MMICS	88
B26 DRAFT CORRESPONDENCE	88
C68 EVALUATE SUGGESTIONS	81
J348 REVIEW IMPLEMENTATION OF SYSTEM MODIFICATIONS, CHANGES, OR CONVERSIONS, SUCH AS MONTHLY RELEASES OR SAN	75
J343 DEVELOP PROCEDURES FOR OPERATING SYSTEMS	75
I320 INITIATE, PREPARE, OR REVIEW DIFFICULTY REPORTS (DIREP)	75
J346 EVALUATE DATA AUTOMATION REQUIREMENTS OR DATA AUTOMATION PROPOSALS	75
J340 DESIGN OR WRITE PROGRAMS FOR SYSTEMS OTHER THAN MMICS	69
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	63
I300 ANALYZE OUTPUT FROM SYSTEMS TESTS, SUCH AS ENVIRONMENTAL SYSTEMS TESTS	56
J344 EDIT OR TEST PROGRAMS IN MMICS	50
I315 IDENTIFY OR ANALYZE INTERNAL FILE ERRORS	50
I324 MAINTAIN SYSTEMS ADVISORY NOTICE (SAN) FILES	50
J337 CONDUCT SYSTEMS STUDIES	50
C67 EVALUATE SOURCE DOCUMENTS, OTHER THAN TO	44
J341 DEVELOP DECISION LOGIC TABLES OR FLOW CHARTS FOR SYSTEM STUDIES	44
I311 CORRECT INTERNAL FILE ERRORS	44

TABLE IV

GROUP ID NUMBER AND TITLE: GRP538 - SPECIAL STUDIES ANALYSTS INDEPENDENT  
JOB TYPE

GROUP SIZE: 6

PERCENT OF SAMPLE: LESS THAN 1%

GRADE: E-5, E-6

AVERAGE TICF: 66 MONTHS

AVERAGE TAFMS: 115 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
H250 CALCULATE MEAN DEVIATIONS USING COMPUTERS	100
H275 CALCULATE STANDARD DEVIATION USING COMPUTERS	100
H242 CALCULATE LEVELS OF SIGNIFICANCE APPLYING PARAMETRIC TESTS USING COMPUTERS	100
H238 CALCULATE LEVELS OF SIGNIFICANCE APPLYING NONPARAMETRIC TESTS USING COMPUTERS	100
R26 DRAFT CORRESPONDENCE	100
F165 EVALUATE MAINTENANCE DATA COLLECTION (MDC) DATA	100
F168 PREPARE AIRCRAFT STUDIES OR BRIEFINGS	83
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	83
F182 REVIEW FULL MISSION CAPABLE RATES (FMCR) FOR DEVELOPING TRENDS OR PROBLEMS	83
H254 CALCULATE MEANS, MEDIAN, OR MODES USING COMPUTERS	83
F147 COMPILE DATA FOR AIRCRAFT SUMMARIES	83
H246 CALCULATE LINES OF REGRESSION USING COMPUTERS	67
M430 COMPUTE OR DETERMINE AIRCRAFT OR MISSILE EQUIPMENT CAPABILITIES	67
E116 PREPARE AF FORMS 2422 (MAINTENANCE ANALYSIS REFERRAL)	67
H279 CALCULATE STANDARD ERRORS OF MEANS USING COMPUTERS	67
M438 COMPUTE OR DETERMINE MAN-HOUR UTILIZATION FACTORS	67
H290 CONSTRUCT FREQUENCY DISTRIBUTION GRAPHS	67
M429 COMPUTE MTBF	67
I305 CONSTRUCT AIR FORCE ONLINE DATA SYSTEM (AFOLDS) INQUIRIES	67
H298 PRESENT BRIEFINGS TO EXPLAIN ADVERSE TRENDS	50
H230 CALCULATE CORRELATION COEFFICIENTS USING PEARSON'S PRODUCT MOMENT CORRELATION METHODS (PMCM) BY COMPUTERS	50
H288 CONSTRUCT CONTROL CHARTS FOR AVERAGES	50

TABLE V

GROUP ID NUMBER AND TITLE: GRP435 - HQ AFOTEC/USAFTAWC PERSONNEL

INDEPENDENT JOB TYPE

GROUP SIZE: 5

PERCENT OF SAMPLE: LESS THAN 1%

GRADE: E-7, E-8

AVERAGE T1CF: 194 MONTHS

AVERAGE TAFMS: 226 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	100
M423 CALCULATE AIRCRAFT OR MISSILE EQUIPMENT OR SYSTEMS RELIABILITY	100
H254 CALCULATE MEANS, MEDIANS, OR MODES USING COMPUTERS	100
H246 CALCULATE LINES OF REGRESSION USING COMPUTERS	100
H275 CALCULATE STANDARD DEVIATION USING COMPUTERS	100
H279 CALCULATE STANDARD ERRORS OF MEANS USING COMPUTERS	100
H238 CALCULATE LEVELS OF SIGNIFICANCE APPLYING NONPARAMETRIC TESTS USING COMPUTERS	100
M424 CALCULATE MEAN TIME TO RESTORE (MTTR) EQUIPMENT TO OPERABLE STATUS	80
M430 COMPUTE OR DETERMINE AIRCRAFT OR MISSILE EQUIPMENT CAPABILITIES	80
H283 CALCULATE VALIDITY OF INDIVIDUAL SAMPLES USING COMPUTERS	80
C52 COMPILE DATA TO EVALUATE ENGINEERING CHANGES	60
M433 COMPUTE OR DETERMINE AIRCRAFT OR MISSILE MISSION EQUIPMENT AVAILABILITIES	60
F166 FORECAST AEROSPACE VEHICLE COMPONENT OR SYSTEM FAILURES	60
M427 COMPUTE MEAN TIME BETWEEN MAINTENANCE (MTBM)	60
M428 COMPUTE MEAN TIME BETWEEN OCCURRENCE (MTBO) OF DOWNTIME FAILURES	60
H258 CALCULATE PROBABILITY DISTRIBUTIONS BY COMPUTATIONAL METHODS USING COMPUTERS	60
J337 CONDUCT SYSTEMS STUDIES	60
M437 COMPUTE OR DETERMINE MAN-HOUR COST FACTORS	60
J335 ANALYZE PROPOSALS OR SUGGESTIONS FOR SYSTEM MODIFICATIONS	60
J338 COORDINATE SYSTEM DEVELOPMENT WITH COMPUTER PROGRAMMERS, FUNCTIONAL MANAGERS, OR OTHER ANALYSTS	60
C74 VALIDATE MAINTENANCE PROCEDURES	60

TABLE VI

GROUP ID NUMBER AND TITLE: GRP230 - OPERATIONAL TEST AND EVALUATION TEAM  
 ANALYSTS INDEPENDENT JOB TYPE  
 GROUP SIZE: 10 PERCENT OF SAMPLE: LESS THAN 1%  
 GRADE: E-6 AVERAGE TICF: 136 MONTHS  
 AVERAGE TAFMS: 166 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
M421 ASSEMBLE DATA OR RECORDS FOR COMPUTATION OF STATISTICS, SUCH AS MEAN TIME BETWEEN FAILURE (MTBF)	90
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	90
M427 COMPUTE MEAN TIME BETWEEN MAINTENANCE (MTBM)	90
M429 COMPUTE MTBF	90
M424 CALCULATE MEAN TIME TO RESTORE (MTTR) EQUIPMENT TO OPERABLE STATUS	90
E139 UPDATE COMPUTER LISTINGS	70
B26 DRAFT CORRESPONDENCE	70
F168 PREPARE AIRCRAFT STUDIES OR BRIEFINGS	60
C52 COMPILE DATA TO EVALUATE ENGINEERING CHANGES	50
M423 CALCULATE AIRCRAFT OR MISSILE EQUIPMENT OR SYSTEMS RELIABILITY	50
F165 EVALUATE MAINTENANCE DATA COLLECTION (MDC) DATA	40
J338 COORDINATE SYSTEM DEVELOPMENT WITH COMPUTER PROGRAMMERS, FUNCTIONAL MANAGERS, OR OTHER ANALYSTS	40
J340 DESIGN OR WRITE PROGRAMS FOR SYSTEMS OTHER THAN MMICS	40
E134 PREPARE MAINTENANCE DATA COLLECTION REPORTS	40
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	40

TABLE VII

GROUP ID NUMBER AND TITLE: GRP192 - C-E STAFF ANALYSTS INDEPENDENT JOB TYPE  
 GROUP SIZE: 17 PERCENT OF SAMPLE: LESS THAN 1%  
 GRADE: E-6 AVERAGE TICF: 126 MONTHS  
 AVERAGE TAFMS: 154 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
B26 DRAFT CORRESPONDENCE	94
G223 REVIEW CEM EQUIPMENT STATUS REPORTS FOR ACCURACY	82
G211 EVALUATE CEM EQUIPMENT STATUS REPORTS	82
G226 REVIEW CEM INVENTORY REPORTS FOR ACCURACY	76
G191 CALCULATE CEM EQUIPMENT RELIABILITY	76
G219 PREPARE CEM STUDIES	76
G201 COMPILE DATA FOR CEM MAINTENANCE SUMMARIES	71
G220 PREPARE WRITTEN NARRATIVES OF CEM MAINTENANCE SUMMARIES	71
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	71
E130 PREPARE GROUND CEM EQUIPMENT STATUS DATA REPORTS	71
G207 CORRECT CEM SOURCE DOCUMENT ERRORS	71
C72 MAKE STAFF ASSISTANCE VISITS	65
G194 CALCULATE CEM MISSION EQUIPMENT AVAILABILITY	59
M421 ASSEMBLE DATA OR RECORDS FOR COMPUTATION OF STATISTICS, SUCH AS MEAN TIME BETWEEN FAILURE (MTBF)	59
B22 DEVELOP WORK METHODS OR PROCEDURES	59
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	53
G197 CALCULATE CEM SYSTEMS RELIABILITY	53
G216 PREPARE CEM BRIEFINGS, EXCLUDING MAINTENANCE ANALYSIS CAPABILITIES	47
G224 REVIEW CEM EQUIPMENT UTILIZATION OR STATUS REPORTS FOR INCLUSION OF REQUIRED INFORMATION	47
B19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	47
B21 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	47
A13 PREPARE OR UPDATE LOCAL OPERATING INSTRUCTIONS	47
C68 EVALUATE SUGGESTIONS	41

TABLE VIII

GROUP ID NUMBER AND TITLE: GRP206 - PLANS AND SCHEDULING PERSONNEL CLUSTER  
 GROUP SIZE: 560 PERCENT OF SAMPLE: 26%  
 GRADE: E-4, E-5 AVERAGE TICF: 60 MONTHS  
 AVERAGE TAFMS: 102 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
L398 INITIATE SCHEDULED INSPECTIONS	84
L378 ASSIGN INDIVIDUAL JOB CONTROL NUMBERS FOR PLANNED MAINTENANCE	82
L395 DISTRIBUTE MAINTENANCE PLANS OR SCHEDULES	81
L375 ADJUST SCHEDULES TO MEET EMERGENCY OR PRIORITY MAINTENANCE REQUIREMENTS	79
L414 SCHEDULE ACCOMPLISHMENT OF TCTO	78
L382 CONDUCT OR ATTEND DAILY MAINTENANCE PLANNING MEETINGS	78
N447 LOAD DISCREPANCIES INTO SYSTEM RECORDS	76
L418 SCHEDULE REPLACEMENT OF TIME CHANGE ITEMS	72
L406 POST SCHEDULING INFORMATION ONTO VISUAL MEDIA, SUCH AS BOARDS OR CHARTS	72
L407 PREPARE INSPECTION PACKAGES	72
L384 COORDINATE FLYING/UTILIZATION OR MAINTENANCE SCHEDULING CHANGES WITH ACTION AGENCIES	71
L394 DEVELOP WEEKLY UTILIZATION OR MAINTENANCE SCHEDULES FOR AEROSPACE VEHICLES	70
L410 PREPLAN DAILY MAINTENANCE	68
L415 SCHEDULE AEROSPACE VEHICLE INSPECTIONS	67
L390 DEVELOP MONTHLY UTILIZATION OR MAINTENANCE SCHEDULES FOR AEROSPACE VEHICLES	64
N444 FORECAST INSPECTION OR TIME CHANGE REQUIREMENTS USING REMOTE DEVICES	64
L385 COORDINATE MAINTENANCE REQUIREMENTS WITH OPERATIONS	63
L411 PROJECT MAINTENANCE REQUIREMENTS	62
M426 COMPUTE HOURS TO NEXT PHASE	58
K370 REVIEW SCHEDULING EFFECTIVENESS DATA	54
L404 PLAN CORROSION CONTROL SCHEDULES	53



TABLE IX

GROUP ID NUMBER AND TITLE: GRP420 - TIME CHANGE MONITORS INDEPENDENT  
 JOB TYPE  
 GROUP SIZE: 36 PERCENT OF SAMPLE: 2%  
 GRADE: E-3, E-4 AVERAGE TICF: 37 MONTHS  
 AVERAGE TAFMS: 56 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
N454 OPEN OR CLOSE REMOTE DEVICES	100
K357 INITIATE TIME CHANGE ACTIONS	86
N444 FORECAST INSPECTION OR TIME CHANGE REQUIREMENTS USING REMOTE DEVICES	86
N462 UPDATE INSPECTION OR TIME CHANGE REQUIREMENTS USING REMOTE DEVICES	83
N448 LOAD INITIAL INSPECTION OR TIME CHANGE REQUIREMENTS INTO SYSTEM RECORDS	83
K362 PREPARE "DUE TIME" ON NEWLY ADDED TIME CHANGE ITEMS	81
E139 UPDATE COMPUTER LISTINGS	67
K354 CONDUCT MANUAL RECORDS REVIEWS	53
L418 SCHEDULE REPLACEMENT OF TIME CHANGE ITEMS	50
K358 MAINTAIN MANUAL RECORDS OF RECURRING INSPECTION TIMES OR DATES	47
N445 INPUT OR UPDATE CURRENT CONDITION STATUS OF ASSIGNED EQUIPMENT USING REMOTE DEVICES	42
L378 ASSIGN INDIVIDUAL JOB CONTROL NUMBERS FOR PLANNED MAINTENANCE	42
L398 INITIATE SCHEDULED INSPECTIONS	42
N461 UPDATE EQUIPMENT OPERATING TIMES USING REMOTE DEVICES	39
L407 PREPARE INSPECTION PACKAGES	36

TABLE X

GROUP ID NUMBER AND TITLE: GRP396 - TCTO MONITORS INDEPENDENT JOB TYPE  
 GROUP SIZE: 62 PERCENT OF SAMPLE: 3%  
 GRADE: E-4 AVERAGE TICF: 46 MONTHS  
 AVERAGE TAFMS: 74 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
K371 REVIEW TCTO STATUS REPORTS	100
K373 UPDATE TCTO CHANGES OR REPORTS	100
K374 VERIFY AUTOMATED TCTO STATUS REPORTS	98
N463 UPDATE TCTO STATUS INFORMATION USING REMOTE DEVICES	94
N451 LOAD TIME COMPLIANCE TECHNICAL ORDER (TCTO) REQUIREMENTS INTO COMPUTER RECORDS	94
K366 REVIEW OR MONITOR DAILY STATUS OF TIME COMPLIANCE TECHNICAL ORDERS (TCTO) PROGRAMS	90
L403 PARTICIPATE IN MONTHLY TCTO KIT RECONCILIATION MEETINGS	90
N454 OPEN OR CLOSE REMOTE DEVICES	81
E139 UPDATE COMPUTER LISTINGS	76
L414 SCHEDULE ACCOMPLISHMENT OF TCTO	66
L387 DETERMINE ITEMS REQUIRING MODIFICATION OR ACTION UNDER TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	63
O476 COORDINATE WITH OTHER WORKCENTERS OR SUPPLY AGENCIES ON TCTO OF ON-SHELF SPARES	61
O477 COORDINATE WITH PLANS AND SCHEDULING OR SUPPLY AGENCIES ON TCTO ACCOMPLISHMENT OF ON-SHELF SPARES	55
L378 ASSIGN INDIVIDUAL JOB CONTROL NUMBERS FOR PLANNED MAINTENANCE	44
B40 PREPARE REQUISITIONS FOR SUPPLIES OR EQUIPMENT	39
K365 REVIEW MASTER ID INPUTS	34
K354 CONDUCT MANUAL RECORDS REVIEWS	34
E142 UPDATE TECHNICAL ORDER FILES	34

TABLE XI

GROUP ID NUMBER AND TITLE: GRP453 - CEMS DOCUMENTATION PERSONNEL

INDEPENDENT JOB TYPE

GROUP SIZE: 85

PERCENT OF SAMPLE: 4%

GRADE: E-4, E-5

AVERAGE TICF: 53 MONTHS

AVERAGE TAFMS: 97 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
K373 UPDATE TCTO CHANGES OR REPORTS	95
N462 UPDATE INSPECTION OR TIME CHANGE REQUIREMENTS USING REMOTE DEVICES	93
N463 UPDATE TCTO STATUS INFORMATION USING REMOTE DEVICES	93
K366 REVIEW OR MONITOR DAILY STATUS OF TIME COMPLIANCE TECHNICAL ORDERS (TCTO) PROGRAMS	89
N451 LOAD TIME COMPLIANCE TECHNICAL ORDER (TCTO) REQUIREMENTS INTO COMPUTER RECORDS	88
K357 INITIATE TIME CHANGE ACTIONS	87
N448 LOAD INITIAL INSPECTION OR TIME CHANGE REQUIREMENTS INTO SYSTEM RECORDS	79
L414 SCHEDULE ACCOMPLISHMENT OF TCTO	73
K362 PREPARE "DUE TIME" ON NEWLY ADDED TIME CHANGE ITEMS	69
L418 SCHEDULE REPLACEMENT OF TIME CHANGE ITEMS	68
K354 CONDUCT MANUAL RECORDS REVIEWS	66
L403 PARTICIPATE IN MONTHLY TCTO KIT RECONCILIATION MEETINGS	66
L378 ASSIGN INDIVIDUAL JOB CONTROL NUMBERS FOR PLANNED MAINTENANCE	59
L387 DETERMINE ITEMS REQUIRING MODIFICATION OR ACTION UNDER TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	59
N461 UPDATE EQUIPMENT OPERATING TIMES USING REMOTE DEVICES	55
K353 CONDUCT AUTOMATED RECORDS REVIEWS	54
K356 INITIATE OR MAINTAIN MASTER ID LISTINGS	49
K358 MAINTAIN MANUAL RECORDS OF RECURRING INSPECTION TIMES OR DATES	47
K365 REVIEW MASTER ID INPUTS	46
N445 INPUT OR UPDATE CURRENT CONDITION STATUS OF ASSIGNED EQUIPMENT USING REMOTE DEVICES	42

TABLE XII

GROUP ID NUMBER AND TITLE: GRP130 - PRODUCTION CONTROL PERSONNEL CLUSTER  
 GROUP SIZE: 218 PERCENT OF SAMPLE: 10%  
 GRADE: E-4, E-5 AVERAGE TICF: 64 MONTHS  
 AVERAGE TAFMS: 107 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
0492 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	84
0501 RECONCILE DIFM LISTS, SUCH AS R-26 REPORT	69
0465 ASSIGN JOB CONTROL NUMBERS FOR OFF-EQUIPMENT WORK	69
0471 COORDINATE DUE IN FROM MAINTENANCE (DIFM) PROCESSING ACTIONS WITH UNITS OF SUPPLY	67
0505 SCHEDULE CALIBRATION OR MAINTENANCE OF PME	66
A7 ESTABLISH WORK PRIORITIES	62
0502 RESCHEDULE IN-SHOP MAINTENANCE	62
0466 ASSIGN PRIORITIES FOR SHOP REPAIR OR FABRICATION	61
0494 MAKE IN-PROGRESS WORK CHECKS	60
E139 UPDATE COMPUTER LISTINGS	60
0493 MAKE ENTRIES ON DD FORMS 1348-1 (DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT)	56
0484 IDENTIFY PME ITEMS	55
0487 INITIATE FOLLOW-UP ACTION ON WORK IN PROGRESS AT MAINTENANCE WORKCENTERS	52
0503 REVIEW AWAITING PARTS (AWP) LISTINGS FROM BASE SUPPLY, SUCH AS R-19 LISTS	52
0485 IDENTIFY REPARABLES	51
0474 COORDINATE MAINTENANCE TURNAROUND ACTIONS WITH UNITS OF SUPPLY	50
0498 PERFORM VISUAL INSPECTION OF REPARABLES	46
0507 TRANSPORT EQUIPMENT TO, FROM, OR BETWEEN MAINTENANCE WORKCENTERS	44
0490 MAINTAIN JOB CONTROL NUMBER REGISTERS	43
K356 INITIATE OR MAINTAIN MASTER ID LISTINGS	43
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	40
0480 DETERMINE PRIORITIES FOR INSPECTION OF PME EQUIPMENT	39

TABLE XIII

GROUP ID NUMBER AND TITLE: GRP472 - MAJCOM AVDOs INDEPENDENT JOB TYPE  
 GROUP SIZE: 5 PERCENT OF SAMPLE: LESS THAN 1%  
 GRADE: E-7, E-8 AVERAGE TICF: 155 MONTHS  
 AVERAGE TAFMS: 222 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
B26 DRAFT CORRESPONDENCE	100
L412 REVIEW AEROSPACE VEHICLE EQUIPMENT STATUS OR INVENTORY DOCUMENTS FOR ACCURACY	100
F180 REVIEW AIRCRAFT INVENTORY REPORTS FOR ACCURACY	100
E139 UPDATE COMPUTER LISTINGS	100
F177 REVIEW AEROSPACE VEHICLE STATUS REPORTS FOR ACCURACY	100
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	80
L397 GATHER OPERATIONAL DATA, SUCH AS FLYING HOURS, FROM OTHER AGENCIES	80
F160 ESTABLISH PROCEDURES FOR SUBMISSION OR RESUBMISSION OF REPORTS WITH AEROSPACE VEHICLE MANAGERS	80
F174 REVIEW AEROSPACE VEHICLE EQUIPMENT UTILIZATION REPORTS FOR ACCURACY	80
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	80
C72 MAKE STAFF ASSISTANCE VISITS	80
N441 COORDINATE WITH DATA SERVICES ON ACCURACY OR TIMING OF REPORTS	80
E120 PREPARE AIRCRAFT OR MISSILE STATUS DATA	80
L408 PREPARE OR MAINTAIN MECHANIZED REPORTS ON AEROSPACE VEHICLE OR EQUIPMENT STATUS, INVENTORY, OR UTILIZATION	60
N446 INPUT OR UPDATE CURRENT INVENTORY DATA ON ASSIGNED EQUIPMENT USING REMOTE DEVICES	60
F156 CORRECT AEROSPACE VEHICLE SOURCE DOCUMENT ERRORS	60

TABLE XIV

GROUP ID NUMBER AND TITLE: GRP178 - TECHNICAL TRAINING INSTRUCTORS  
INDEPENDENT JOB TYPE

GROUP SIZE: 23

PERCENT OF SAMPLE: 1%

GRADE: E-5

AVERAGE TICF: 84 MONTHS

AVERAGE TAFMS: 133 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
D83 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	96
D77 ADMINISTER OR SCORE TESTS	96
D86 COUNSEL TRAINEES ON TRAINING PROGRESS OR PROBLEMS	87
D88 DEVELOP COURSE CURRICULA OR PLANS OF INSTRUCTION (POI)	70
D87 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	65
B21 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	65
D94 EVALUATE TRAINING METHODS OR TECHNIQUES	57
D92 EVALUATE COURSE CURRICULUM OR POI	52
D101 WRITE TESTS, OTHER THAN SKT	43
D97 PREPARE OR UPDATE TRAINING RECORDS	39
D95 EVALUATE TRAINING PROGRAMS	35
D84 CONDUCT TRAINING BRIEFINGS	30
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	30
D90 ESTABLISH RESIDENT COURSE TRAINING REQUIREMENTS	30

TABLE XV

GROUP ID NUMBER AND TITLE: GRP174 - SUPERVISORS/MANAGERS CLUSTER  
 GROUP SIZE: 333 PERCENT OF SAMPLE: 16%  
 GRADE: E-6, E-7 AVERAGE TICF: 118 MONTHS  
 AVERAGE TAFMS: 194 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
B26 DRAFT CORRESPONDENCE	91
B21 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	89
C73 PREPARE AIRMAN PERFORMANCE REPORTS (APR)	85
B35 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	83
B23 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	82
B19 ADVISE CHIEF OF MAINTENANCE ON EQUIPMENT MAINTENANCE OR UTILIZATION	79
A7 ESTABLISH WORK PRIORITIES	78
A10 PLAN OR SCHEDULE WORK ASSIGNMENTS	74
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	74
A13 PREPARE OR UPDATE LOCAL OPERATING INSTRUCTIONS	72
C51 ANALYZE WORKLOAD REQUIREMENTS	67
A2 ASSIGN SPONSORS FOR NEW PERSONNEL	66
A5 ESTABLISH PERSONNEL PERFORMANCE STANDARDS	63
D81 CONDUCT OJT	62
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, EXCLUDING TRAINING REPORTS	61
D87 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	58
B27 DRAFT OR REVISE JOB DESCRIPTIONS	57
F165 EVALUATE MAINTENANCE DATA COLLECTION (MDC) DATA	55
C70 EVALUATE WORK SCHEDULES	54
F168 PREPARE AIRCRAFT STUDIES OR BRIEFINGS	53
C60 EVALUATE INSPECTION REPORTS OR PROCEDURES	49